JPRS 79310 27 October 1981

## Worldwide Report

**EPIDEMIOLOGY** 

No. 252



FBIS FOREIGN BROADCAST INFORMATION SERVICE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports</u>
Announcements issued semi-monthly by the National Technical
Information Service, and are listed in the <u>Monthly Catalog of U.S. Government Publications</u> issued by the <u>Superintendent of Documents</u>, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

# WORLDWIDE REPORT EPIDEMIOLOGY

No. 252

### CONTENTS

#### HUMAN DISEASES

BRAZIL		
	Annual December December To Annual December Deliberto	
	Arcoverde Demands Resources To Avoid Dengue Epidemic (O GLOBO, 5 Oct 81)	1
CUBA		
	Country Continues Anti-Dengue Campaign	
	(Various sources, various dates)	2
	Ramirez Cruz ANAP Message, by Jose Ramirez Cruz 'TRABAJADORES' Editorial	
	Trade Union Activities, by Rebeca Antunez	
	National Wrap-Up, by Reynold Rassi, et al.	
	WHO Director Hails Efforts, by Jose A. de la Osa Pesticides Used, by Susana Lee	
	Provincial Measures	
	Soviet Aid, by Adolfo Gomez Gonzalez	
FINLAND		
	Pogostan Virus Spreads, More Than 100 Patients With Cutaneous Eruptions	
	(HELSINGIN SANOMAT, 11 Sep 81)	15
GUYANA		
	Briefs	
	Malaria Control	17

## INDIA Briefs Gastroenteritis in Raipur Cholera Epidemic Reported INDONESIA Briefs Gastroenteritis in Southeast Maluku IRAN Briefs Cholera Cases Reported MALAYSIA Typhoid Outbreak Reported in Perak State (NEW STRAITS TIMES, 13, 17 Sep 81)..... Three Settlements Affected Twenty-six New Cases Dengue Reported in Johore, Cholera in Perak (BUSINESS TIMES, 3 Sep 81; NEW STRAITS TIMES, 2 Sep 81)...... Dengue Under Control Two New Cholera Cases MOZAMBIQUE Briefs Anti-Mosquito War NEPAL Briefs Rabies Kills Three PAKISTAN

18

18

19

20

21

22

23

24

25

26

(THE BULLETIN TODAY, 28 Sep 81).....

Briefs

**PHILIPPINES** 

Spinal TB on Increase

Cholera Epidemic Feared in Cagayan

#### TURKEY

Shortage of Doctors Noted in State, SS (CUMHURIYET, 29 Jul 81)	SK Hospitals
VENEZUELA	
Briefs Measles Outbreak	29
YEMEN ARAB REPUBLIC	
Health Ministry Official Discusses New (Abamd 'Ali al-Khadar Interview	V Developmental Plans V; AL-MADINAH, 26 Aug 81)
ZAIRE	
Briefs Dysentery Epidemic	33
ANIMAL DIS	SEASES
INTER-AFRICAN AFFAIRS	
Conference Discusses Combat of Epizoot (LA NOUVELLE MARCHE, 9, 14 Sep	tic Diseases 81)
Preparatory Meeting Final Communique	
INDONESIA	
Briefs Jembrana Disease in Denpasar Blackleg in Brahman Cattle From	n Australia 37
MAURITIUS	
Research To Control 'Stomoxys Nigra' I (LE MAURICIEN, 1 Aug 81)	Reported 38
NIGERIA	
Briefs Cattle Vaccinated	40

#### VIETNAM

Regulations on Animal Epidemiologic Control Issued	
(NHAN DAN, 29 Aug 81)	41
Song Be Stamps Out Bovine Epidemics (QUAN DOI NHAN DAN, 31 Aug 81)	44
PLANT DISEASES AND INSECT PESTS	
CAPE VERDE	
Insects Introduced To Protect Crops (VOZ DI POVO, 16 Sep 81)	45
MAURITIUS	
White Worm Attack on Sugar Cane Fields Discussed (LE MAURICIEN, 13, 14, 18 Aug 81)	46
Uncertainty Regarding Species Immediate Action Urged Studies, Information Deemed Necessary	
SIERRA LEONE	
Briefs OICMA Session	49
SWEDEN	
New Form of Elm Disease Hits Southeast Scania (Lennart Lundegardh; SVENSKA DAGBLADZT, 7 Sep 81)	50
USSR	
Rail Cars Returning to Finland Infested With Colorado Beetle (HELSINGIN SANOMAT, 7 Sep 81)	53

#### ARCOVERDE DEMANDS RESOURCES TO AVOID DENGUE EPIDEMIC

PY071353 Rio de Janeiro O GLOBO in Portuguese 5 Oct 81 p 4

[Text] Brasilia (O GLOBO) -- The dengue epidemic recorded in Cuba—which up to 9 August has affected 342,000 persons with 160 deaths—has led Health Minister Waldyr Arcoverde to ask the Planning Ministry for extra-budget resources to establish an emergency plan next year to fight the acdes accepti mosquitoes, carriers of the disease that are also responsible for the urban yellow fever. According to Health Ministry data, unconquered concentrations of these mosquitoes exist in the cities of Rio de Janeiro, Salvador and Natal.

According to Pedro Tauil, director of the Department of Eradication and Control of Endemic Diseases, of the Superintendency for Publish Health Campaigns [SUCAM], although the infestation rate in these three cities (Rio: 0.54 percent; Salvador: 0.09 percent; and Natal: 0.06 percent) is far below the rate considered to be a risk for the transmission of urban yellow fever and of dengue, the presence of the mosquito remains as a real menace, and the intensification of control measures becomes more urgent in view of the outbreak of the epidemic in Cuba.

Explaining that the ministry considers any percentage above 4 percent a risk of epidemic, Tauil stated that although SUCAM is succeeding in reducing the rate of infestation in Natal and Salvador, they are not having the same success in Rio de Janeiro where the difficulties are greater due to the size of the city, to the large number of buildings and to the difficult access to certain areas such as the slum areas. According to Health Ministry data, infestation in Rio de Janeiro in June reached 2.6 percent, a percentage considered very high by technicians of the Yellow Fever Department.

CSO: 5409/2008

#### COUNTRY CONTINUES ANTI-DENGUE CAMPAIGN

#### Ramirez Cruz ANAP Message

Havana GRANMA in Spanish 20 Jul 81 p 3

[Message from Jose Ramirez Cruz, president of ANAP [National Association of Small Farmers]; date and place not given]

[Text] Before the triumph of the revolution, when epidemics raged and diseases ran rampant in our rural areas, when thousands died because of a lack of medical care or medicines, the rulers in power remained indifferent. Today, with the appearance and spread in our country of the disease scientifically known as "dengue," a malady transmitted by the Aedes aegypti mosquito, our party, backed by all the people, heads up the fight to protect the health of every citizen and above all, our children.

Since the first outbreak of the disease, government institutions and mass organizations have taken urgent measures to eradicate this epidemic and the Aedes aegypti mosquito, its carrier.

For that reason, the National Association of Small Farmers, working in keeping with the orientations of our party and government, is doubling its efforts to fight the disease. Every rural man, woman, senior citizen and child should intensify his support for the measures outlined in order to eliminate this disease that affects the population and undermines the productive capacity of our workers.

For that reason, every Agricultural and Livestock Cooperative (CPA), every credit and services cooperative and every farmers association must continue to organize our action and efforts, for which purpose we have set up leadership teams in charge of carrying out this activity in every rank-and-file organization, which will be headed by the chairman of the leadership junta or board of directors, the secretary of education and the head of the agitation and propaganda commissions, the health activist and the sanitary activist of the FMC [Federation of Cuban Women] delegation.

The establishment of work brigades in all rank-and-file organizations, which will be responsible for mobilizing for the elimination of mosquito breeding grounds by spraying, the use of the chemical abate, clearing, use of oil in stagnant water and other activities, will be headed by the National Operations Group.

Every rank-and-file organization will set up the work brigades it deems necessary, based on its own individual needs.

The control and inspection committees set up will be in charge of visiting housing units and possible breeding grounds of mosquitoes in order to verify whether control measures have been applied with the proper care.

They will engage in this activity using the resources of our rank-and-file organizations, such as sprayers, tractors, carts and other support means used in the task.

They will work in coordination with the People's Government health sector in order to hold lectures relating to measures aimed at the elimination of dengue and the eradication of the mosquito, as well as health debates and sanitary meetings.

We must carry out all the guidelines and every farmer must become an active soldier in the destruction or elimination of real or potential breedings grounds of the Aedes aegypti.

We must all be aware of this attitude and continually practice these measures in every collective.

With the cooperation and responsibility of everyone, we are sure that we shall win this fight against the epidemic through the eradication of the mosquito and the elimination of dengue.

Every rural family, from the leadership team, work brigade or control and inspection committee, on farms and in the homes, must constitute a center of constant vigilance in order to protect the environmental hygiene and sanitation of our rural areas.

It is the task of our provincial and municipal leaders to exert rigorous control over the measures set forth and go further in the task of spreading information so that it will become a mass activity, the only way of achieving victory in this important and human task.

We are confident of success in this new battle of the people, now in defense of the collective health.

#### 'TRABAJADORES' Editorial

Havana TRABAJADORES in Spanish 21 Jul 81 p 1

[Editorial]

[Text] A sustained and systematic effort requires that the trade union movement carry out the sanitation measures indicated by the public health organization in the current phase of the campaign against the Aedes aegypti mosquito, the carrier of dengue.

In a recent speech, Comrade Roberto Veiga, secretary general of the trade union confederation, revealed the program of measures to be undertaken by the CTC [Central Organization of Cuban Trade Unions] and its unions on this occasion. Veiga said that the contribution which the trade union movement could make to the fight against the causes of the epidemic is truly substantial. "Our workers and union leaders must demand of the administration the eradication of potential mosquito breeding grounds and the application of measures set forth," he emphasized.

Veiga added the need for active participation in the sanitation and hygiene measures so that our work centers may declare themselves free of breeding grounds of the Aedes aegypti mosquito.

The most recent information on development of the campaign indicate that the measures being taken are the right ones. This is the time for a special effort for the creation of hygienic and sanitary measures making it possible to eliminate the carrier, an effort on a part with the one being made by the country to eliminate the epidemic.

The self-inspection to be made at work centers will make it possible to see the problems that have already been solved and detect others that may have been neglected. The participation of workers in learning the difficulties, as well as ascertaining what measures may be used to eradicate them, is a true mass solution to a problem requiring the action of each and every one of us.

It is not a question of inspecting centers in order to enumerate problems, but rather, in order to learn how to solve them, how much remains to be done and which problems have not been solved.

Union officials must watch and ensure that this is done and that problems are solved.

Using the production or service assemblies will enable all workers to be familiar with them and help with their solution. The administration must take measures in order to provide solutions for problems that exist.

It must be noted that there are many conditions for the reproduction of the mosquito and we need to set up the machinery for a continuing, systematic fight against the carrier, in homes, units, establishments, and so on, especially since our work centers are in populated areas and are part of them, not isolated. Negligence would undermine the local measures adopted to wipe out the carrier.

Those centers which, because of their nature, produce large quantities of waste in the way of raw materials, scrap and other materials that become breeding grounds and potential hotbeds of the Aedes aegypti, require action that sometimes they cannot provide themselves. Consequently, the participation of municipal or provincial organizations becomes indispensable.

This phase of work requires better quality and two aspects are needed: The trade unions must report and demand the eradication of breeding grounds and the government administrations must do what is stipulated by Public Health.

A number of events, serving as a prelude to the work of thousands of men and women who will make a decisive contribution to this major campaign, were held throughout the island's municipalities yesterday.

The following is a summary of yesterday's swents, based on the latest information that has reached our staff.

Guillermo Garcia in Cardenas

Matanzas (AIN) -- Maj Guillermo Garcia, member of the Politburo and the Central Committee of the party, presided over the ceremony marking the beginning of the intensive phase of the campaign against the dengue epidemic in Cardenas.

Leonides Gonzalez, president of the People's Government Municipal Assembly and head of the operations group of the campaign, spoke of the need to wage the battle with fervor equal to that which our people have demonstrated, generation after generation.

Officials introduced the nucleus of the party and rank-and-file committee of the UJC [Union of Young Communists], who now form the brigade that will be in charge of work for this second phase.

Jose Luis Rodriguez, first secretary of the party in the municipality, spoke at the closing session to sum up the antiepidemic work done in Cardenas since the first outbreaks of the disease and in compliance with the guidelines of the provincial operations group.

Similar ceremonies were held simultaneously at 0900 hours in the 14 municipalities of Matanzas, where the intensive phase of the campaign is already underway.

#### Havana

With a ceremony held in Carlos J. Finlay Park, named after the famous Cuban scientist who discovered that the Aedes aegypti mosquito was the carrier of yellow fever, the intensive campaign against the insect that will be waged throughout the country got underway.

Over 300 workers who will work in the campaign in the municipalities, including health and support personnel from political and mass organizations, were present at the ceremony. Those who will work full-time in the campaign against the mosquito were their new uniforms.

Jose E. Mederos, first secretary of the party in the Central Havana district, summed up the ceremony, emphasizing that this battle against the Aedes aegypti is also a battle against imperialism and that our people will emerge victorious from this one as well. He said that on a day like today, standing before the statue of the scientist Carlos J. Finlay, the commitment is that not one housing unit or building will go without being fumigated in this intensive campaign and that high-quality work will be done in this decisive struggle against dengue and its carrier.

Indifference cannot be the response to the appeal made by the CTC and its affiliated unions. Workers must not remain silent in the face of repeated failures on the part of some government agencies. There is no other alternative.

Let us all work to make our centers free of the Aedes aegypti mosquito!

#### Trade Union Activities

Havana TRABAJADORES in Spanish 21 Jul 81 p 1

[Article by Rebeca Antunez]

[Text] Since yesterday, there have been union self-inspections at all work centers in the country in order to ensure the smooth operation of dengue epidemic control measures and eradication of the carrier, the Aedes aegypti mosquito, a task that will last until 31 July.

This information was released at a press conference by Adolfo Valdivia, general secretary of the National Union of Health Worekrs and a member of the national committee of the workers confederation for the campaign to eradicate the mosquito.

During the self-inspections, each work center will have to detect possible breeding grounds for mosquitoes, sanitary and hygiene problems, ensure compliance with the spraying plan and the cleanup of warehouses and storage areas and enforce measures set forth by the Ministry of Public Health.

According to Valdivia, the result of the self-inspections must be discussed by the union with government agencies and solutions must be demanded more energetically.

Through production assemblies, workers will subsequently be informed as to progress on the campaign at their respective labor centers.

Valdivia, who is also a member of the party Central Committee, reported that on 19 August, a meeting of the National Committee of the CTC will be held to evaluate the entire self-inspection process, to take place the last 10 days of each month.

Valdivia said that in order to give incentives to those who do comply with measures, a certificate will be issued to centers declaring themselves free of the Aedes aegypti. In conclusion, he stressed the work of innovators and rationalizers who have put their knowledge in the service of the campaign.

#### National Wrap-Up

Havana GRANMA in Spanish 4 Aug 81 p 3

[Articles by Reynold Rassi: Herminio Reynaldo Reyes, Aldo Isidron del Valle and Joaquin Oramas]

[Text] The intensive phase of the program to eliminate the dengue epidemic and eradicate the Aedes aegypti mosquito began yesterday throughout the country.

This marked the beginning of a fight of extreme importance to the nation in the field of public health.

Also presiding over the ceremony were Nelson Negrin, president of the People's Government Municipal Assembly in Central Havana, Lt Col Guillermo Penalver, from the National Antiaegypti Campaign Group, Dr Luis Martinez, municipal director of public health, and other officials from organizations and leaders of mass organizations.

Health and support personnel later went to the operations bases where they had their spraying equipment: hand and automatic sprayers, and went about preparing the 95-percent malathion and filling their equipment. The representatives of the campaign in Central Havana then began their spraying work on the edge of the municipality, house by house, in areas divided up into blocks.

Las Tunas--The second phase of the intensive attack on the Aedes aegypti mosquito, the carrier of dengue, also began with ceremonies in the eight municipalities and the support of the political and mass organizations in the province.

Yesterday, spraying began inside and outside houses and buildings in the municipalities in order to destroy possible breeding grounds and adult mosquitoes.

In the fight to the death against the carrier of dengue, 574 comrades are participating. They were trained by the Ministry of Public Health and in the 5 weeks that this phase will last, they will have the help of all the people in the intensive fight against the Aedes aegypti.

Rodolfo Puente Ferro, alternate member of the Central Committee and second secretary of the party in the province, attended the meeting held in the Mario Munoz Health Polytechnical School in Las Tunas.

#### Villa Clara

Santa Clara-Today, Tuesday, the campaign against the Aedes aegypti mosquito moved into the second day of action in this intensive phase that will mobilize broad groups of our population. Yesterday, assemblies were held in the 13 municipalities of Villa Clara to kick off the battle against the dangerous carrier of diseases.

Here, Elia Garcia Pa ino, second secretary of the party provincial committee, other political leaders and representatives of mass organizations and the operations group at the higher and municipal level, presided over the meeting held to begin the battle and to send off the brigades that will participate in it.

Among those in attendance were the members of the sanitary forces, in uniform and with their sprayers and other equipment. With the help and cooperation of the people, they are undertaking their battle against the mosquito.

The municipality has 170 pieces of equipment to be used in the spraying of homes and nearby areas. At the park were the home sprayers, mobile machines and hand sprayers, with the necessary means for environmental treatment.

GRANMA was also informed that in the remaining municipalities, following the solemn ceremony marking the opening of the battle, brigade members began their fumigation in accordance with the program outlined.

The provincial operations group stated that all personnel participating in the action received proper training. Since yesterday, the home fumigation plan has been stepped up through the use of mobile spraying equipment to be used on homes and surrounding areas.

Alfredo Nieto, president of the People's Government Municipal Committee and chairman of the operations group at that level, said that in Santa Clara, 285 workers, including 22 women, had been trained.

In addition, Law 27 of this year continues to be applied to those who violate sanitary measures. By 2 August, fines had been issued to over 4,000 centers, organizations and homes.

#### Attack on the Aedes

The thorough attack on the Aedes aegypti mosquito began yesterday in the municipality of Plaza, with the participation of some 300 health workers, including persons operating automatic and hand sprayers and inspectors. They moved out into the 13.2 square kilometers of the territory in order to complete the intensive phase of the program to eliminate the carrier of dengue.

After a brief ceremony at Calixto Garcia Hospital, persons working full-time in the campaign against the Aedes aegypti, wearing their light blue uniforms, and the large group of workers mobilized by the party and the UJC to support their work, went to the gathering point at B and 13 in Vedado, where the hand and automatic sprayers were distributed. There they received their last organizational instructions. By the afternoon, they had already left for different zones in order to begin their necessary work, house by house, in order to spray 45,914 homes and buildings in one month.

Dr Otto Pantoja, director of public health in the municipality, informed GRANMA that both full-time and support personnel have been properly trained to carry out the campaign successfully. All are identified and those not in uniform (support personnel) have arm bands and identification cards.

The personnel, divided into brigades, began their work in different spots in the municipality. The first brigade, equipped with automatic sprayers, began in the northern area, following the blocks of homes from 1st and 12th streets. In that area, 57 automatic sprayers are being used, each operated by two workers who take 45-minute turns doing the spraying.

This brigade, which is using an insecticide to kill adult mosquitoes, will reach the last blocks, located around the La Tropical Gardens, in around 10 days.

At the same time, another brigade with full-time personnel, left from the vicinity of La Tropical and is moving north, spraying with a substance that kills both mosquito larvae and adults.

A third contingent will work from 0500 to 0900 hours in the morning and from 1700 to 2100 hours at night in the fight against adult mosquitoes, leaving from the center of the municipality and moving toward different points.

The inspectors brigade will then carry out their statistical survey in order to verify how far the campaign has progressed and find any mosquito breeding grounds. They will visit 30 percent of the 790 blocks and 20 percent of the 45,914 homes and buildings to be fumigated in Plaza. The campaign will also have the participation of a special high-power spraying team from the FAR [Revolutionary Armed Forces], which will work at night and early in the morning.

"We shall wage this campaign just as we have done on memorable occasions in defense as well as production," said young inspector Odalys Borrego, speaking on behalf of her comrades at the ceremony held at Calixto Garcia Hospital to kick off the campaign, a ceremony summed up by Juan Nestor Lima, first secretary of the party in the municipality.

#### WHO Director Hails Efforts

Havana GRANMA in Spanish 5 Aug 81 p 1

[Article by Jose A. de la Osa]

[Text] Dr Halfdan Mahler, general director of the World Health Organization, said yesterday that "the strategy outlined by the Cuban Government in the fight it is waging against dengue and the Aedes aegypti mosquito is an extremely valid one and I am sure that Cuba will be successful in its efforts.

"In order to eradicate the Aedes," he said, "it is not enough to know techniques and methodologies, but rather, there must also be enthusiasm in the application of technical measures."

Mahler then added that "for me, this is the most important thing and it is what I have observed in this country: the combination of technical knowledge and enthusiasm in the application of measures outlined."

The statements by Dr Mahler were made during his return flight to Havana on a Yak-40 following a visit he made to care centers in Granma Province, accompanied by Dr Sergio del Valle, member of the Politburo of our Communist Party and minister of public health.

The general director of the WHO said that the fight being waged in all the courtry's hospitals is also very important, hospitals "where the best care is being iven to all dengue victims."

"Once more, I would like to say that we have observed that the Cuban health workers are demonstrating tremendous awareness of their responsibility and feel constantly motivated. In this epidemic, they have done everything humanly possible to save the life of every sick child," Dr Mahler concluded.

#### Posticides Used

Havana GRANMA in Spanish 5 Aug 81 p 1

[Article by Susana Lee]

[Text] "I believe that if a country can eradicate this mosquito, that country is Cuba, because of its organization, the cultural level of its people and the spirit of discipline and work that our people have." (Fidel, 26 July, Las Tunas)

The campaign to achieve this goal is not only based on the more than 13,000 members of the new health army that will begin its work throughout the country in this intensive phase against the Aedes aegypti: visitors, fumigators, inspectors and supervisors.

Nor is it based on the millions of pesos invested — almost all in convertible currency — in Abate, Baytex, malathion, DDT and other pesticides, as well as in hand and automatic sprayers, Tifas, Lecos and other transport equipment and spare parts.

The fight against the tiny carrier of dengue and other diseases is mainly based on the work done by the masses to achieve thorough sanitation of urban and rural zones.

Much has been said in recent days about sanitation and yet, we have perhaps not considered its most precise dimension. Sanitation means environmental and domestic hygiene and consequently, it involves many, many aspects of our life in the home, at school, at work centers and our surrounding area, on the bus we take, the shop where we buy our food, the beach and restaurants we visit.

At times we confuse the word and think almost automatically about throwing away what we do not need, but it is not merely a matter of that.

Although we shall continue to emphasize the topic in later columns, we are giving here the main instructions on sanitation from the head of the National Operations Group, Sergio del Valle, member of the Politburo and minister of public health.

What we are dealing with is the sanitation of cities, rural areas, work centers in general (meeting places, transport terminals, care centers and schools, domestic trade centers, warehouses, slaughterhouses and other sites), sever systems, and in rural areas, livestock raising units for all types of animals, agroindustrial centers, isolated housing units, cooperatives, agricultural and forest enterprises and others.

The specific measures for working in this phase are:

- 1) thorough cleaning and clearing of all patios, yards, barren land, plots of land, perimeters (5 meters minimum) around homes and housing units, cities, storehouses, work centers and other sites;
- 2) cleaning of flat-roofed houses, garages and other places with difficult access;

- 3) the elimination by proper final disposal (in dumps, incineration, and so on), of all junk and trash, building materials scrap and other waste inside or within a 50-meter radius of all the sites mentioned. In the case of useful materials, proper organization must be used. All brush and weeds must be eliminated.
- cleaning of sewer systems;
- 5) elimination of unauthorized garbage dumps;
- 6) cleaning and clearing of ditches and irrigation channels; and
- 7) proper organization of all types of storehouses, including storage areas on farm units, feed-manufacturing plants and wool-packing areas, as stipulated.

With respect to what was done on Monday, the day the intensive phase of the fight to eradicate the Aedes aegypti and eliminate the dengue epidemic began, one must point out that only 85.7 percent of the cases seen during the day were admitted, which does not correspond to the orientations given to admit all in order to provide proper treatment and help check the chain of transmission of the disease.

It was reported that the provinces with the lowest percentages of patients admitted were Las Tunas, Holguin, Granma, Villa Clara, Santiago de Cuba and Ciego de Avila, all with figures under 80 percent of the total number of cases seen.

Fines were imposed at 289 centers because of failures to comply with the sanitary measures set forth.

It was observed at certain locations that both the permanent brigades and the fumigators making home visits and treating housing units are behind because of beginning their tasks at work centers. It was therefore suggested to the municipal operations groups that, taking advantage of the daily program of visits, the corresponding agencies and administrations should first be notified so that preparations might be made and the work improved.

We repeat that improving work does not mean hurrying, meeting goals, increasing the number of regulations. Quality and optimum use of resources provided for the campaign and this phase in particular are the words of the day.

#### Provincial Measures

Havana JUVENTUD REBELDE in Spanish 7 Aug 81 p 1

[Article by L. H. S.]

[Text] In a massive response to the orientations issued by our commander in chief on 26 July, all provinces are reporting a relentless fight against the current epidemic of dengue and tenacious efforts to wipe out or at least reduce to the maximum extent the existence of the mosquito that carries it.

The National Operations Group emphasizes the importance of guaranteeing strict attention to brigade personnel carrying out the intensive attack in the present phase of this fight against the carrier of dengue.

It has been reported that a proportional reserve of automatic sprayers is now being set up in the municipalities so that they may be repaired without delay. Workshops are operating to serve the teams, giving priority to immediately resolving any breakdown.

In order to avoid delays, a system has been created through the CDR [Committees for the Defense of the Revolution] to notify work centers and residents of areas that are going to be treated one day ahead of time.

This will make it possible to give proper protection in the home to television sets, refrigerators and food so that they will not be contaminated by the insecticides and so that all conditions may be created for effective treatment.

The previous notification of visits will also make it possible for administrators of the centers to help the brigades, facilitate their work and if necessary, adopt protective measures where required.

From 8 to 22 August in Pinar del Rio, an intensive sanitation phase will take place in all work centers. For this purpose, municipal meetings will be held to establish commitments along this line.

The FMC [Federation of Cuban Women] in Navana City, with its sanitary brigade members, has held 1,672 talks, lectures and health debates and updated 1,336 murals on the topic.

Together with the CDR in the province, 33,356 readers of texts prepared by the Ministry of Public Health were held.

Sanitary brigades in Sancti Spiritus are working to clean up cities, rural communities, agricultural and industrial centers, housing units and homes, sewer systems and places with difficult access.

CDR members in Granma Province have cleaned out debris and brush, 4,950 lots, plots of ground and yards and have visited over 50 work centers. In addition, they have held 110 special health meetings at the CDR level and applied 51 penalties to violators of Decree Law 27.

Party leaders in Las Tunas have arranged to check work there more completely by brigade heads in each area in order to help eradicate difficulties immediately.

In Holguin, a brigade of plumbers has been set up to solve problems with water outlets and thereby avoid possible breeding grounds of mosquitoes in the provincial capital.

A total of 125 women passed the carrier inspector course and have begun to work in Santiago de Cuba in this intensive phase of fighting dengue and its carrier.

They will make the entomological surveys aimed at verifying and locating sites where there still exist larvae and adult mosquitoes.

In that province also, men trained as sprayers have been working since 3 August to complete intensive fumigation of all areas. A new treatment phase with Abate began in the entire province yesterday, as arranged.

On the Isle of Youth, safety measures were analyzed in connection with the intensive sanitation day planned in work centers and homes in the municipality for this week-end.

#### Soviet Aid

Havana JUVENTUD REBELDE in Spanish 18 Aug 81 p 1

[Article by Adolfo Gomez Gonzalez]

[Text] At precisely 0259 hours this morning, the first fumigation equipment out of a lot of 50 pieces of equipment donated by the Soviet Union to our country for the campaign being waged to eradicate the Aedes aegypti mosquito arrived on Cuban soil at the port of Mariel.

The equipment is that mentioned by Fidel at the closing session of the assembly celebrating the 28th anniversary of the attack on the Moncada Barracks, held in Las Tunas.

All the equipment will immediately be incorporated into the second phase of the campaign against the mosquito that carries the dengue epidemic in our country.

This help from the USSR resulted from the difficulties Cuba faced in acquiring equipment to fight the Aedes aegypti mosquito, a fight in which, as Fidel said, the nation has spared no efforts or economic sacrifices.

The high-quality Soviet equipment was given to us.

One group of equipment is automatic and each machine can fumigate 300 blocks in only 3 hours. This was demonstrated in the tests done with other machines already in Cuba.

In order to give an idea of their high productivity, it can be said that if one compares the machines with similar ones from capitalist countries, such as those now in use, the possibilities are tripled.

The other type of equipment that is part of the shipment is portable and weighs about 70 kilograms. Its efficiency is also very high because two of them mounted on a trailer exceed the work capacity of one self-propelled machine.

Hixers for preparing the insecticide in the proper proportions also arrived.

Captain of Boat

Leonid Rybak is captain of the Soviet boat that brought the cargo. He is an old friend of Cuba who already knows nearly all the country's ports because of his countless visits made since 1960.

"In its fight for peace, socialist Cuba is not alone," he said. "Imperialism does not frighten it with its attacks, nor can it force it to change the path chosen by its people. Today, we proudly do our internationalist duty."

Rybak explained that when roads were being built in the taigs in his country, this type of equipment was used with great success.

#### Honor and Pleasure

For Lorenzo Jorrin, chief of operations of Brigade 2 at the Port of Havana, who now works in Mariel, unloading the boat bearing the solidary message of the brother nation of Lenin is a great honor.

"It is also a pleasure for our group to unload such valuable cargo," he said. "In this way, we also make a contribution to this battle of everyone."

11,464 CSO: 5400/2206

#### POGOSTAN VIRUS SPREADS, MORE THAN 100 PATIENTS WITH CUTANEOUS ERUPTIONS

Helsinki HELSINGIN SANOMAT in Finnish 11 Sep 81 p 13

[Article: "Pogostan Disease Spreads in Northern Karelia, More Than 100 Skin Eruption Patients in Ilomantsi"]

[Text] Joensuu--The peculiar fever--with cutaneous eruptions, which was observed by Ilomantsi Health Center Physician Pasi Kuusisto in the middle of the 1970's and which has been named the Pogostan virus, is running rampant this fall to a greater degree than ever before and over a more extensive area.

More than 100 patients have come for treatment of this skin eruption at the Ilomantsi Health Center. In addition to cutaneous eruptions, the virus manifests a fever and pains in the joints.

Kuusisto stated that the same disease has been observed this fall in the areas of Kuopio, Mikkeli, and Jyvaskyla, among other places. In addition to Ilomantsi, it has also appeared elsewhere in Northern Karelia.

At the Ilomantsi Health Center patients are given treatment instructions and specimens are taken, which are sent to the work group directed by Docent Markus Brummer-Korvenkontio in Helsinki University's Institute for the Study of Viruses.

"The purpose is to isolate the virus, which is suspected of causing this disease. It is possible that the disease is spread by a kind of gnat, but what kind, has not been determined," stated Kuusisto.

Brummer-Korvenkontio came to Ilomantsi in late summer and collected the first specimens of gnats. The collection of specimens will continue in Ilomantsi throughout the fall as long as gnats continue to fly.

Brummer-Korvenkontio stated that the same type of disease was also observed in Sweden in the 1970's, but the Swedes have discontinued the study of the disease. Now the intent in Finland is to take advantage of the materials previously collected in Sweden.

A completely new type of virus may be in question. "It is now already known to which group the virus belongs. It has a cross reaction with an African virus," stated Brummer-Korvenkontio.

Viruses belonging to the same group caused extensive epidemics in Africa and Australia in the 1950's. At a certain scientific congress in Paris Brummer-Korvenkontio heard that diseases of the Pogostan virus type were also appearing in Central Europe.

The studies now begun in Finland may last years. If it turns out that a new virus is found, it would be the fourth virus to be found in Finland. There are approximately 400 registered viruses in the world.

The results of this research will be sent to United States where the registration center will study and compare them to all virus studies as well as give the virus a name. In general, the name given is that of the place in which it was found. In this case it was Pogosta.

10576

CSU: 5400/2207

MALARIA CONTROL -- The Ministry of Health has announced that there has been a decrease in the incidence of maleria in Guyana during the past few months. From January to May, 1981, the number of cases reported was 1,110 in comparison with 1,650 for last year during the same period. According to Government Chief Medical Officer, Dr. Walter Chin, the reduction in the number of malaria cases was due to a number of factors. Apart from the mass drug treatment that was undertaken last year in the Rupunumi area, Dr. Chin said that there was an intensification of a campaign aimed at ensuring that houses were sprayed with DDT insecticide. He also added that health officials in the country have continued their efforts to detect cases of malaria and treat patients promptly in order to avoid carriers of the disease. But Dr. Chin claimed that some diseases such as influenza and perhaps malaria, have a cycle. At times they are very prevalent while on other occasions there is a marked drop in the number of cases. And the Chief Medical Officer feels that we in Guyana are probably experiencing the period when malaria is on the decline. He said that health workers are optimistic that the disease will continue to drop in its incidence for the rest of the year. [Text] [Georgetown GUYANA CHROHICLE in English 2 Sep 81 p 11]

GASTROENTERITIS IN RAIPUR—Raipur, September 20—Raipur district has been declared an epidemic-hit area, as 12 people have died of gasteroenteritis in the Dhamatari subdivision in the last few days. The district administration has launched a massive inoculation drive. [Text] [Bombay THE TIMES OF INDIA in English 21 Sep 81 p 9]

CHOLERA EPIDEMIC REPORTED--Cholera in an epidemic form has so far claimed two lives in the Barisaudpur area of Bihar, official sources said. Another 10 persons were seriously affected and admitted to hospital. UNI [Text] [Calcutta THE STATESMAN in English 21 Sep 81 p 13]

GASTROENTERITIS IN SOUTHEAST MALUKU-In the government center of Aru, Dobo Subdistrict, Southeast Maluku, 22 persons died and 160 others are seriously ill with gastroenteritis. Dr Abiyoso, chief of the Dobo Public Health Center, in his report to the chief of the Regional Level Health Service, Southeast Maluku, said the disease attacked the population of Marlasi and Kabuten Villages, which are located far from any health services. It is, therefore feared that the disease will spread unless it is suppressed immediately. The health official also said that prior to the outbreak of this disease in Aru, Dobo Subdistrict, it killed 40 persons in Phoirenan Village, Kei Besar Elat Subdistrict, and Abean Village in the Kei Kecil Tual Subdistrict. The disaster also caused a loss of voters for the coming 1982 general election. Information obtained from the Level II Regional Election Committee of Southeast Maluku indicated that a number of gastroenteritis victims had voting rights or could have been elected but no actual figures were provided for the drop in the number of voters in this area. The committee estimated a loss of 10 votes in the Babar, Tepa Subdistrict, a loss of 10 votes in Tanimbar Utara, Larat, 10 in Elat, 18 in Tual, 20 votes in Dobo. The number of deaths from other diseases has not yet been calculated. Meanwhile gastroenteritis broke out for the first time in the first class city of Sukabumi, attacking nine persons between 2 and 60 years of age between the last week of June and the first week of July. [Excerpts] [Jakarta MERDEKA in Indonesian 22 Jul 81 p 1] 6804

CHOLERA CASES REPORTED—Tehran, 8 Oct (AFP)—Twenty-eight people died of cholers between September 19 and 26, the ISLAMIC REPUBLIC newspaper reported today, quoting an Iranian Health Ministry statement. Some 1,172 of 3,390 people reported to be suffering from vomiting and diarrhea during the same period and symptoms of the disease, the newspaper said. [Text] [MCO80952 Paris AFP in English 0943 GMT 8 Oct 81]

CSO: 5400

#### TYPHOID OUTBREAK REPORTED IN PERAK STATE

#### Three Settlements Affected

Kuala Lumpur NEW STRAITS TIMES in English 13 Sep 81 pp 1, 9

[Excerpts]

IPOH, Sat. — Perake health authorities are going all out to get to the source of the typhoid epidemic that has struck the Feldas settlements of Trolako North, South and the periphery of Sungkai some 60 miles south of here.

The first victim was a housewife who ad a fever on Aug. 9. Quick tests were run and once it was confirmed that she had typhoid, health personnel conducted a house-to-house probe to

smoke put" any personwith signs and symptoms.

The result was an influx of suspected and confirmed cases into the Tapah hospital. The numberlater swelled to about 100 cases.

a The director of Medical and Health Services, Perak, Datuk Dr Dharam Singh, said health units in the three affected settlements have screened virtually the entire population of some 4,000 people, but they have yet to identify any carrier or the source of the disease.

The Sungel Klah and Sun-

get Jentung which meander through the Trolak schemes have been ruled out as "very unlikely" possibilities as the source of the infection.

Checks have also reportedly revealed no shorigins estilement in the upper reaches of the rivers whose activities may have contaminated the water.

The PWD water supply to the schemes at it; intake from Troiak Timer to the supply tank has been checked and samples showed no typhoid germs.

And with the "good" sanitary facilities and draimage in the felds schemes, health staff are working on the assumption that the infection must have been introduced by an outsider.

#### Twenty-six New Cases

Kuala Lumpur NEW STRAITS TIMES in English 17 Sep 81 p 10

[Text]

IPOH, Wed. — Twenty-six new cases of typheid were confirmed during the past twe days, making a lotal of 48 cases including one death till this morning since the outbreak of the disease in certain areas in the Batang Padang district early this menth.

A spekesman of the Perak State Medical and

Health Department said here today that another carrier of typhoid was detected and the total number of carriers was

"We are still investigating the cases in the affected areas and centinging our search for those partiering from the

"Our officers and men are continuing their hoppe-te-house checks and all these found with fever have been taken to the Tapah hospital for treatment," he added

He said 80 were in the hospital of whom 48 were confirmed to be suffering from the disease and two were carriers.

The places affected are Puent Latiban Troink, Troink Seintan and Troink Utars in the Folds scheme areas.

#### DENGUE REPORTED IN JOHORE, CHOLERA IN PERAK

#### Dengue Under Control

#### Kuala Lumpur BUSINESS TIMES in English 3 Sep 81 p 3

[Text]

THE dengue fever situation in Kluang is under control with no new reports of deaths or confirmed cases in the district, Johors Medical and Marilla Services Directors trict. Johore Medical and Health Services Director Datuk Dr Tow Slang Yeow said yesterday. The last four patients, aged between nine and 18,

were discharged from the Kluang hospital last

He said preventive measures, however, were still being actively car-

ed out. He told the people not

to be unduly alarmed but

to be unduly alarmed but to cooperate closely with the health authorities. The Health Ministry recently gasetted Iduang as a dengue prone area. Datuk Dr Tow said preventive measures like fogging all sensitive areas and house-to-house spraying to destroy-all possible mosquite breedling grounds were still being carried out.

The authorities, Datuk Dr Tow warned, would enforce the clean-up campaign strictly and those found to have

breeding grounds in and around their houses would be compounded. A total of 12 desgue

A total of 13 dengue cases were reported last month, eight of dengue fever and four of dengue has morrhagic fever which claimed the life of a five-year old child on Aug. 17.

Eince January, a total of 71 cases have been reported in Johora, 44 cases of dengue fever and 27 of dengue has morrhagic fever with three deciha.

— Bernama

#### Two New Cholera Cases

#### Kuala Lumpur NEW STRAITS TIMES in English 2 Sep 81 p 1

[Text]

KOTA BAHRU, Tues, — With the new cases, of total of 20 cholera cases have been confirmed in the State — one near here and the other in Tumpai.

They were detected in Kampung Tongkang, Tumpat and Kampung Tongkang, Tumpat and Kampung Pulau Kundur, about 11 km from here, on Saturday.

The current outbreak

was first detected in Kelantan on Aug. 3 and so far six districts have been declared cholers in-

fected areas. They are Kota Bahru, Machang, Pasir Mas, Bachok, Pasir Puteh and day. The current outlreak Tumpat - Bernama

cso: 5400/8403

ANTI-MOSQUITO WAR--Fumigation against the mosquitoes that have invaded the city of Maputo in recent days has already started in the Sommerschield, Carreiva de Tiro and COOP districts. According to the director of preventive health services in Maputo, it is necessary to clean up the pools of stagnant water and the quagmires that constitute breeding grounds for the mosquitoes in order to make the operation a success. The fumigation will continue in other areas also affected by the mosquitoes. Meanwhile, the director of preventive health services stressed that the people must cooperate in the fight against these insects by keeping their water containers and houses clean so that the mosquitoes will not find fertile ground for breeding. [Text] [Maputo NOTICIAS in Portuguese 6 Oct 81 p 12]

NEPAL

#### BRIEFS

RABIES KILLS THREE--Ramechhap, Sept. 20—Three persons and fifty-one cattleheads are reported to have died of rabies in Ramechhap bazar and neighbouring villages recently. Twenty-one people who had dog-bites have left for Kathmandu for anti rabies vaccine. Meanwhile, local people have stressed the need to make available anti-rabies vaccine at local health centres and to kill stray dogs here.

[Text] [Kathmandu THE MOTHERLAND in English 21 Sep 81 p 1]

SPINAL TB ON INCREASE—Rawalpindi, Sept 29: Tuberculosis of spine, leading to the paralysis of legs and arms, is on increase in the region, according to Dr Aslam Piracha, an orthopaedic surgion of the Rawalpindi General Hospital. Speaking at the 205th clinical meeting of the Pakistan Medical Association (PMA), Dr Piracha said he had so far examined many cases of spinal tuberculosis which were brought to him in an advanced stage. He said some of the cases were successfully treated while the chronic ones did not respond as expected. Dr Piracha said patients suffering from hTB of spine readily fell a prey to paralysis and resultantly lost control over nassing of urine. He attributed the disease to fast spreading quackery and illiteracy. Dr Piracha said hundred per cent cure of the disease was available. Earlier, Dr Naim-ur-Rehman, a neurosurgeon, discussed 13 cases of spinal tuberculosis in which both legs and arms were paralysed. According to Dr Maim, all the patients of spinal TB were successfully treated with both operative techniques and anti-tubercular drugs. [Text] [Karachi DAWN in English 30 Sep 81 p 5]

PHILIPPINES

#### CHOLERA EPIDEMIC FEARED IN CAGAYAN

Manila THE BULLETIN TODAY in English 28 Sep 81 p 14

[Text] Tuguegarao, Cagayan, Sept. 27—An epidemic is feared likely to break out in the entire Cagayan Valley in the wake of numerous cases of "diarrhea, gastro-enteritis and even El Tor (cholera)" during the rainy months.

Health authorities have found the numerous persons afflicted by such diseases which have long been the menace to the region's over one million population every start of the rainy season.

Statistics show that 30 out of 100 persons suffered from respiratory and intestinal disorders last year, affecting mostly schoolchildren.

To avert the incidence from becoming an epidemic, the health ministry's regional office has ordered an allout immunization drive from the puberty-age level and up, and from the urban centers to the remote areas.

Director Manuel P. Najera has instructed provincial health officers to utilize every facility within their control to prevent epidemic.

These intestinal and respiratory diseases usually occur during the months from June to December, the official said.

The director also urged chiefs of hospitals to make available sufficient supply of drinking water as a precautionary measure or emergency treatment.

He also instructed government doctors to secure immediately Oresol for rehydration of diarrhea and other intestinal diseases.

Typhoon "Rubing" which hit the Valley directly might spawn bacterial infestants causing health disorder, reports said.—(ORG)

#### SHORTAGE OF DOCTORS NOTED IN STATE, SSK HOSPITALS

Istanbul CUMHURIYET in Turkish 29 Jul 81 p 7

[Text] ISTANBUL NEWS SERVICE—The steady diminution of TAM—GUN [All-Day Law] compensation by inflation and the discontinuation altogether of this compensation for new doctors has resulted in a large reduction in the number of doctors, especially at the state and SSK [Social Insurance Organization] hospitals and dispensaries. Doctors' leaving the hospitals and dispensaries as they reach retirement age, in particular, has created a tremendous doctor shortage even in as big a city as Istanbul.

More than 60 doctors retired in the past 6 months from Health Ministry hospitals in Istanbul. An equal number have reportedly put in for retirement and will retire after their summer vacation. At the SSK hospitals, doctors retiring or choosing to go into private practice have created a 30-percent reduction in staff, though counting the ones on annual leave and those just up for retirement, it comes to an actual shortage of 50 percent.

#### Big Shortage in Dispensaries

The dispensaries are particularly affected by the doctor shortage, being unable to offer outpatient treatment in many specialties. Patients who cannot get treatment at the dispensaries are piling up at the hospital out-patient clinics. However, there are areas which cannot be treated at the hospital out-patient clinics either.

Reportedly, there are practically no anesthesiologists or bacteriologists at the Health Ministry hospitals. There are practically no eye-ear-throat specialists or dermatologists. Teams cannot be made up at many hospitals because there are no doctors in the needed specialties.

#### Departments Lacking Doctors

None of the SSK dispensaries has been offering normal out-patient treatment lately. Even in the largest SSK hospitals, the out-patient departments are closed in certain specialties. Even such important services as x-rays and pediatrics are all threatened with closure soon.

Authorities offer the following reasons for the occurrence of such an extensive doctor shortage even in the large centers such as Istanbul where doctors are concentrated:

"Doctors benefitting from TAM-GUN have had no increase in income since the law was passed, but indeed declines. A specialist with the highest seniority may make 36,000 liras monthly. Yet when the same doctor retires, he will draw a pension of only 25,000 liras. Income from private practice or a second job such as providing medical service at a workplace would be much higher and the work would not be as exhausting as in the hospitals and out-patient clinics as well. With the addition of economic pressure to discontent with working conditions and lack of security for the future, doctors are quitting their jobs on state staffs. And new ones are not coming to replace them. A new specialist makes 12,000 liras per month, 19,000 adding fringe benefits."

Both Health Ministry and SSK officials at the hospital and Istanbul provincial level confirm that the shortage of doctors is becoming a very serious problem even in Istanbul. They point out, however, that they can see no remedy nor take any measures at the present as all involve legal changes.

With health services thoroughly riddled by the shortage of health and laboratory personnel in addition to the doctor shortage which developed so rapidly over a few months in the hospitals and dispensaries, appointments are being given months in advance even for emergency x-rays and treatment. In addition to the long lines waiting for hours at the out-patient clinics, the average number of patients treated per day is in excess of 100. Doctors stress that there can be no question of proper treatment in an out-patient clinic under these conditions.

8349

MEASLES OUTBREAK—Caracas, 28 Sep (LATIN-REUTER)—Some 30 Indians have died in the past few days as a result of an outbreak of measles in jungle regions of Bolivar State. A Health Ministry official has indicated that more than 100 cases have been reported. He said that the Indians didn't have immunity to measles since they live in remote areas and don't have much contact with civilization. [Buenos Aires LATIN in Spanish 2113 GMT 28 Sep 81 PA]

CSO: 5400

#### HEALTH MINISTRY OFFICIAL DISCUSSES NEW DEVELOPMENTAL PLANS

Jiddah AL-MADINAH in Arabic 26 Aug 81 p 19

[Interview with Yemeni Undersecretary of Health Dr Ahmad 'Ali al-Khadar by 'Abd-al-Rashid Andijani: "Yemen's Undersecretary of Health Tells AL-MADINAH: 'We Appreciate the Kingdom's Heroic Stands on and Unlimited Support for the Yemeni People in All Fields'," date and place not given]

[Text] In this interview, Dr Ahmad 'Ali al-Khadar, undersecretary of health of our brother state of the YAR, reviews the Health Ministry's projects for Yemen's next 5-year plan and commends the generous aid the kingdom is providing for the construction of hospitals and health clinics in his country.

[Question] What did you achieve in the health field during your previous 5-year plan and what projects does the present plan include?

[Answer] The previous 5-year plan of our country aimed at covering 20 percent of our basic requirements for health projects, including the construction of hospitals and the training and qualifying of cadres. However, the present plan contains many projects and we hope that these projects can be accomplished and that we will not be confronted with obstacles that will keep them from being implemented. There are more than 500 students studying abroad who will complete their studies in medicine during the current plan.

We have in our hospitals more than 400 doctors, 50 percent of whom are specialists in various diseases.

Opening of a Medical College

[Question] Do you intend to open a college of medicine rather than relying entirely on sending students abroad?

[Answer] As a matter of fact, a college of medicine is one of our goals and we hope to achieve it during our coming plan. We have already submitted a proposal to the government concerning the establishment of this college and this project will be carried out in accordance with studies made by the building committee. The construction of the College of Sciences is slated to begin in December 1981 and will be under the direction and authority of the Ministry of Education.

General Budget of 200 Million

[Question] What was the size of the ministry's budget for this year and how much do you lack in the way of resources?

[Answer] The Health Ministry's budget for this year was over 200 million rivals. The government supports the ministry's projects materially and morally in order to cover our needs. However, as I mentioned in a previous reply, it is manpower that holds back the implementation of our aspirations.

Two Teams in Rotation

[Question] Health cooperation between the kingdom and Yemen is strong. What joint projects are being implemented?

[Answer] There are two health teams that are alternating in raising health consciousness. The first team operates out of Jiran and the other team operates out of San'a'. Among the duties of these two teams are the pinpointing of disease-infested areas, the identification of contagious diseases, and the spraying of insecticides.

More Than 200 Hospitals

[Question] How many hospitals and health centers are there and do they meet the need?

[Answer] There are more than 200 hospitals, clinical centers, and health units in Yemen. Twenty-four of these are large hospitals. We have hospitals that specialize in surgery, female disorders, internal medicine, and eyes, ears, nose and throat.

Children's Programs

[Question] What have you offered for children and what children's programs do you focus on?

[Answer] We have suffered from childhood diseases and we have been unable to offer anything to eliminate or treat them completely. However, these diseases have begun to moderate considerably. We now have consciousness-raising programs aimed at vaccinating children 6 years old and under against tuberculosis and polio [and administering 30 innoculations]. We have three vaccination centers and we employ an expanded program which involves 50 percent of all Yemenis. Students work with us during school vacations in field innoculation campaigns covering the rural areas and different parts of the country.

Limited Information Cooperation

[Question] Do television and the other information media cooperate with you in a consciousness-raising campaign?

[Answer] We cooperate with television and radio in consciousness raising, but the time that television and radio allocate us is very little and is not commensurate with the comprehensive consciousness-raising effort we are trying to achieve. We recognize that if we were able to overcome cholera—which is a very serious disease—during the next 10 years, this would be considered a major medical achievement in light of our current resources.

More Concerned With Training

[Question] Doctor, could you specify the future projects that your ministry plans to carry out?

[Answer] Our future projects focus on increased involvement with training in order to prepare specialized human cadres and increase the number of inspectors and nurses by seeking to develop our existing nursing institute. We are also in the process of increasing the number of health units, especially in places that have high population density and lack health services.

A number of hospitals will be established in al-Bayda' with the support of the government of King Khalid. The company has begun studying the program pertaining to the construction of a hospital in Sa'dah. A specialized company will sasume responsibility for the management and operation of these hospitals. Work on construction of the Sa'dah hospital should last no more than 3 years.

Nursing Institute

[Question] You mentioned that you are planning to open a college of medicine. What about nursing institutes?

[Answer] We have a nursing institute in San'a' with two small branches in al-Hudaydah and Ta'izz. The Ministry of Bealth places very great importance on this institute and its two branches. We hope to be able to expand the scope of operation of this institute and the services it offers because nursing is of paramount importance. Self-sufficiency with respect to male and female nurses would free the ministry from the exorbitant sums currently spent to contract these services.

Official and Popular Appreciation for the Kingdom

[Question] Lastly, how do you view Saudi-Yemeni relations and what is your assessment of the future of these relations in the health field?

[Answer] Cooperation between Saudi Arabia and Yemen is very strong and is developing rapidly in all areas. In the health field, Saudi Arabia is providing Yemen with a large amount of aid which is being translated into the construction of hospitals, clinics, and health units as well as medicines, doctors, and other needs.

We in Yemen appreciate the heroic positions of the kingdom and view its commendable attitudes toward the Yemeni people with much admiration and appreciation.

8591

### BRIEFS

DYSENTERY EPIDEMIC—A regional report says that the bacillary dysentery epidemic which was reported a few weeks ago in Katanga, about 40 km from Bukavu, has already claimed many lives. Katanga hospital, which is dealing with an average of 200-300 patients a day, no longer has wedicines to combat the widespread epidemic. The dispensary at the Minor Seminary has also used up its stock of medicines. [LD050118 Kinshasa Domestic Service in French 0600 CMT 4 Oct 81]

### CONFERENCE DISCUSSES COMBAT OF EPIZOOTIC DISPASES

### Preparatory Neeting

Lone LA NOUVELLE MARCHE in French 9 Sep 81 pp 1,4

Excerpts 7 The preparatory meeting of the 20th Council of Ministers of member countries of the Economic Community for Livestock and Heat (CEBV) began yesterday morning in the conference room of the National Agricultural Credit Bank (CNCA), bringing together experts from Benin, Ivory Coast, Upper Volta, and our country, Togo.

The opening session of the preparatory meeting was chaired by the representative of the minister of rural development, Alayisso Ayeva, departmental staff head, in the presence of Dr Andre Bere and Dr Roger Houssa Tall, respectively chairman of the exerts' meeting and executive secretary of the CEBV.

Mr Ayeva dwelt upon the extremely difficult world situation, from both the standpoint of economics and that of animal economy because of the foci of epizootic diseases reported in August and September 1980.

"Your meeting," he told the participants, "is beginning in a very difficult international context, from the political point of view as well as from the economic and financial standpoint, a context dominated by very marked inflation, very high interest rates, and increasingly heavy oil costs. Horeover, from the animal economy standpoint, and since August-September 1980, the fearsome epizootic disease, cattle plague, has been filling stockbreeders with dread in the Sahelian-Sudanese brother countries.

Togo for its part has not discovered a single site of this disease for nearly 10 years. But this satisfying situation has thus suddenly been threatened. Very fortunately, the emergency campaign is now backing up the efforts of our veterinary and animal health services, which have been forced to impose some very strict health inspection measures on imports. That has not been without ill effects, as our supplies of cattle have been diminished considerably as a result. Today we can affirm, on the basis of the results found,

that the sacrifices we have imposed on ourselves have not been in vain. We are still very closely following the development of the epizootic disease, cattle plague, mindful of the appreciable / line omitted in original /, and it is with great relief that we record that all foci of cattle plague have been extinguished up to now."

This rapid control of the situation, Mr Ayeva specified, was made possible as a result of the intervention of the EDF and the FAO, to which organizations he paid tribute \( \subseteq \text{line omitted in original } \) financial contribution of the CEAO (West African Economic Community).

### Final Communique

Lome LA NOUVELLE MARCHE in French 14 Sep 81 pp 1,4

Excerpts 7 The epizootic disease control project in West and Central Africa will actually be able to start in January 1983 in the CEBV (Economic Community for Livestock and Meat) member states.

Such was the decision of the Community's 20th ministerial council, whose deliberations, bringing together Benin, Ivory Coast, Upper Volta, Niger, and Togo, took place in Lome last Friday. To make this feasible, the Council again asked the executive secretariat to continue its contacts with any organization likely to help the Community to make the project a success.

In application of the CEBV's medium and short range program, the Council set up the list of statistical tables on stock raising and the animal products which will be used in 1982, 1983, and 1984 by Community member countries.

According to the final communique sanctioning the Lome meeting, the Council of Ministers examined and adopted;

The minutes of its ordinary meeting held in Ouagadougou on 27 and 28 February 1981;

The treasurer's report on the execution of the 1980 budget and gave the executive secretary full approval for his management.

It also examined the Community executive secretariat's activity report for the period 28 February to 31 July 1981.

It adopted the Community's 1982 budget.

The Council considered at length the organization of the fight against epizootic diseases, and in particular against cattle plague. In this context, it adopted the report of the ad hoc meeting held on 26, 27, and 28 August in Ouagadougou, with the participation of Benin, Ivory Coast, Guinea, Upper Volta, Mauritania, Niger, the Central African Republic, Senegal, the EDF, the FAO, LIPTAKO-GOURMA / expansion unknown 7, the CILSS / Inter-State Committee to Fight the Drought in the Sanel 7, the UDEAC / Customs and Economic Union of Central Africa 7, the CEAO / West African Economic Community 7, the IEMVPT / Institute for Livestock and Veterinary Medicine for Tropical Countries 7, and the CEVB.

On this occasion it rejoiced at the the understanding and helpfulness shown by certain sub-regional, regional, and international organizations within the framework of inter-African and international cooperation, and adopted two motions of thanks, one for the heads of state of the Council of the Entente, and the other for the assistance and aid organizations for their great solicitude toward the emergency campaign against cattle plague.

The Council set its next meeting for September 1982 at Niamey in the Republic of Niger.

### BRIEFS

JEMBRANA DISEASE IN DENPASAR—The Region VI Cattle Disease Investigation Office staff in Denpasar, Bali, have run across the jembrana disease in a field investigation and laboratory tests made of cows owned by cattle farmers in the Bungaya and Tengananan Villages, Karangasem Regency. Precautionary measures have been taken to prevent more deaths and the slow spread of the disease. Control measures consisted of antibiotic injections, vector control through spraying of insecticides for flies and mosquitoes, closing the epidemic region to traffic in cattle, and strict oversight of illegal slaughter of cattle, particularly sick cattle. To aid the prevention efforts mentioned, the Center has provided the Level I Regional Animal Husbandry Service, Bali Province, with antibiotics and insecticides. [Text] [Jskstys DINST HSTSPSN 18 Jul 81 p 3] 6804

BLACKLEG IN BRAHMAN CATTLE FROM AUSTRALIA—Apparently a number of the 839 cattle of the 840 Brahmans originating in Australia and under observation at the Waingapu cattle quarantine station have been attacked by the blackleg disease. Moreover two have died displaying symptoms of broken bones and strangulation. Following an investigation by the Cattle Investigation Office in Denpasar, precautionary measures have been taken to prevent the spread of blackleg in this area. Twelve cows attacked by the disease have been destroyed, and healthy cows have been inoculated with clostridium penta vaccine. Inoculated were 814 mature cattle and 6 calves born during the quarantine period. The 820 cattle reported to be healthy on 16 June 1981 have been released from quarantine. According to the Animal Husbandry Directorate General of the Agriculture Department, importation of brahman cows from Australia is being done under a crash program. [Text] [Jakarta HARIAN UMUM AB in Indonesian 16 Jul 81 p 3] 6804

RESEARCH TO CONTROL 'STOMOXYS NIGRA' REPORTED

Port Louis LE MAURICIEN in French 1 Aug 81 p 4

[Article by S.R.: "Biological Control of the Fly 'Stomoxys Nigra' Pays Off for Cattle Raising in Mauritius"]

[Text] The Stomoxys nigra, a fly which is harmful to animals and which was considered a major obstacle to cattle raising, today no longer represents a danger, in light of research undertaken by the Division of Entomology of the Ministry of Agriculture. This research, spread out over several years, has ended in positive results. Consequently, control of this fly is maintained by a biological means and, in this particular case, with the introduction of a parasite, the Tachineophagus stomoxicida, which comes from Uganda. The Stomoxys nigra, native to Africa, proliferates in humid regions, and its whole population lives in the center of the island.

The alarm was sounded in 1970. Cattle raising in Mauritius was seriously jeopardized because of the presence of an enormous population of harmful flies. Research was undertaken immediately by the Division of Entomology. Two types of harmful insects were discovered: the Stomoxys calcitrans, a cosmopolitan fly whose proliferation has been noted throughout the world, and the Stomoxys nigra, which is native to Africa.

The Division undertook an exhaustive study of the habitat conditions of these flies and discovered an important difference. The Stomoxys calcitrans prefers dry regions, especially the coastal regions, which are ideal for its proliferation, while its cousin prefers humid regions. In light of this research, a parasite from Trinidad was introduced in Mauritius. The results of this method of biological control were not long in coming. The population of the Stomoxys was reduced to a level where it no longer represented a threat to animals. In these zones, cattle raising expanded rapidly. But there was still the central part of the island, where it was thought that the Trinidadian parasite had produced equally good results. This was a mistake, and it was soon discovered that the Stomoxys nigra was resisting and continuing to proliferate so heavily that cattle raising in the humid regions of the island could no longer be considered.

Everything had to be done over! The entomologists, including J. Monty, who is in charge of the Division, were not discouraged. Their strategy was to look for the trouble at the source. An exhaustive study was undertaken and resulted in the discovery of the specific places of proliferation of the Stomoxys nigra.

The entomologists also discovered that proliferation takes place during hot and humid periods, especially after the sugar harvest. As a matter of fact, the dry cane straw lying between the rows in the fields proved to be the breeding nests.

The entomologists considered various means of combating the problem: elimination of the straw or eradication of introducing sterile males—a difficult and costly choice. Control was finally achieved through biological means. The battle would begin at the larva stage. With this aim in view, the Division of Entomology called on the Commonwealth Institute of Biological Control (C.I.B.C.) to find a parasite to combat the Stomoxys nigra. This parasite was discovered by the Institute, in Uganda, and was scientifically baptized Tachineophagus stomoxicida.

After nearly a decade, the population of this parasite today represents from 60 to 70 percent of that of the Stomoxys. The danger for cattle raising has been removed. The research continues, however, and the Division of Entomology is keeping an eye out for an excessive increase in the poulation of the Stomoxys. The research has paid off and, this time, the whole island of Mauritius benefits from it.

9719

### BRIEFS

CATTLE VACCINATED—The Veterinary Officer in charge of Ogoja Local Government, Dr Dennis O. Bassey, has said that over 10,000 cattle were vaccinated by the Ogoja veterinary circuit against various diseases between April and June, this year. He disclosed this yesterday in his office, and added that the anti-vaccines covered sickness such as bovine, pleurophneumania, haemorhagic septicenmia, anthrax and black quarter. Dr Bassey observed that the diseases were too rampant among the cattle in Ogoja and described them as very deadly. During the same period, the circuit vaccinated up to 4,000 birds monthly and the centres covered included Imaje, Ijegu Yala, Govu and Yahe. Other centres were Ibil, Okpoma, Utugwang and the Obudu cattle ranch. He announced plans to further embark on a one-month anti-rabies campaign against dogs and other pests, beginning from October. The one-month campaign, he said would take them to the various villages and urban centres of the circuit and then appealed for co-operation, particularly from dog owners, during the exercise.

[Text] [Kaduna NEW NIGHERIAN in English 16 Sep 81 p 15]

### REGULATIONS ON ANIMAL EPIDEMIOLOGIC CONTROL ISSUED

Hanoi NHAN DAN in Vietnamese 29 Aug 81 pp 1, 4

[Article: "Issuance of Regulations on Animal Epidemiologic Control"]

[Text] To prevent animal diseases from spreading from one area to another within the country and between our country and foreign ones owing to the movement of animals and animal products, on 10 August 1981 the Council of Ministers issued Decree 23-HDBT setting forth regulations on animal epidemiologic control.

Targets of animal epidemiologic control include:

- a. All kinds of livestock, poultry, bees, silkworms, birds, wild animals, marine products, etc., and products derived from the above animals still in preliminary processing form, such as meat, hides, hair and feathers, bones, horns, hooves, etc.
- b. All means of transportation and tools designed to raise animals and contain animal products referred to in point "a".

The Ministry of Agriculture will provide a specific list of categories of animals, animal products, means of transportation, tools for raising animals and containing animal products, subject to epidemiologic control.

Diseases and toxic substances subject to epidemiologic control include:

- a. Communicable diseases and animal parasites which have been found or have never been found in Vietnam.
- b. Communicable diseases and animal parasites under international epidemiologic control authority, and other diseases requiring epidemiologic control which are mentioned in purchase, sales, exchange and assistance agreements signed by Vietnam with foreign countries.
- c. Toxic substances.

The Ministry of Agriculture will provide a specific list of diseases and toxic substances which need epidemiologic control.

All organizations and individuals with a need to move animals and animal products within the territory of the Socialist Republic of Vietnam, from Vietnam to foreign countries, and from foreign countries to Vietnam, must declare this to animal epidemiologic control organs.

Following epidemiologic control, the commodity owner must pay to the animal epidemiologic control organ a fee, in domestic currency (if the owner is a Vietnamese person or organization), or in a foreign currency to be decided upon by Vietnam's animal epidemiologic control organs (if the owner is a foreign person or organization). Amounts and procedures for collection and payment of that fee will be set by the Ministry of Agriculture with the agreement of the Ministry of Finance.

Commodity owners are in charge of treating animals for diseases, taking care of them and storing animal products during the time required for epidemiologic control.

The regulations define conditions for epidemiologic control of domestic, export and import animals.

The animal epidemiologic control system includes:

- a. The Bureau of Animal Epidemiologic Control is under direct jurisdiction of the central government, while stations of animal epidemiologic control for export and import are under the authority of the Ministry of Agriculture Veterinary Department.
- b. In provinces, cities and special zones directly subordinate to the central government, domestic animal epidemiologic control stations and animal epidemiologic control units are under the authority of provincial and municipal agricultural services.
- c. In districts, veterinary cadres specializing in epidemiologic control are under the authority of district veterinary stations.
- d. In major communications centers (land, rail, water and air routes), domestic animal epidemiologic control stations may be set up. The Hinistry of Agriculture will decide whether to place these stations under the direct jurisdiction of the central government or under that of provincial and municipal agricultural services.

In the performance of their duties, animal epidemiologic cadres must wear uniforms and badges, and carry epidemiologic controller's certificates.

All organizations or individuals contributing to the exposing and thwarting of violations of animal epidemiologic control regulations will be rewarded according to general provisions of the state.

Organizations or individuals committing one of the following acts will be prosecuted commensurately with the gravity of the violation:

--Violating provisions on epidemiologic prevention and control and regulations on animal epidemiologic control while moving animals and animal products.

--Not carrying out correctly veterinary sanitation measures set forth by animal epidemiologic control organs as a basis for implementing provisions of these regulations.

-Counterfeiting epidemiologic control papers, dodging epidemiologic control.

Prosecution of violators will take on the following forms:

a. Warning or fine of from 10 dong to 100 dong in a case where the violation was not committed deliberately and has not caused a big damage.

Repeat offenders or first time violators causing a big damage to state properties and to the people's properties and health, and causing a bad impact on the economic, scientific, and technological exchange relationship between our country and foreign ones, will be fined from 200 dong to 10,000 dong, and made to compensate for damages caused by the violation.

Animal epidemiologic control cadres at district veterinary stations are authorized to issue warnings or levy fines from 10 to 100 dong; animal epidemiologic control organs directly subordinate to a province or to the Veterinary Department of the Ministry of Agriculture, are authorized to levy fines up to 10,000 dong. If the violator appeals, the chairman of the people's committee of the same level, or the minister of agriculture (if the animal epidemiologic control organ directly subordinate to the central government is involved), will review the case and make a decision.

- b. Commodities belonging to the violator can be sent back to the organs of places of origin, or be handled on the spot in accordance with provisions of the Ministry of Agriculture; and the owner must bear all handling costs.
- c. If a violation causes a big damage, the violator will be brought to court and tried according to law.

Market management cadres, customs personnel, village public security chiefs, public security cadres and combatants, and border defense troops have the responsibility to coordinate with animal epidemiologic control organs, whenever necessary, to block and arrest violators; and are authorized to record instances of violation before referring them to animal epidemiologic control organs for prosecution.

The regulations on animal epidemiologic control take effect beginning the day of their issuance. All previous provisions concerning animal epidemiologic control contrary to these regulations are null and void.

9213

### SONG BE STAMPS OUT BOVINE EPIDEMICS

Hanoi QUAN DOI NHAN DAN in Vietnamese 31 Aug 81 p 2

[Article: "Song Be: Speedily Stamps Out Many Pockets of Bovine Epidemics"]

[Text] Owing to effective measures to prevent and control animal diseases, and a steady effort to strengthen the veterinary network, in the last days of July 1981 the veterinary branch of Song Be Province detected early, promptly surrounded and stamped out many pockets of bovine epidemics.

After knowing that Pasteurellois broke out in a number of villages of the three districts of Ben Cat, Binh Long and Tan Yen, the provincial veterinary station sent cadres and middle-level students of the provincial agricultural school to the districts and villages to coordinate with on-the-spot forces to promptly treat the affected bovines while vaccinating 15,300 healthy bovines then under quarantine. That is why hundreds of seriously affected bovines have been saved, pockets of epidemics had been cordoned off and stamped out right away, thus limiting the damages which otherwise might be caused by a spread of the disease.

To block the germs of diseases, the province of Song Be has carried out a series of measures to strengthen the epidemiologic control network over buffaloes and cattle departing from and arriving in the province from other places, and over butchering of livestock at slaughter houses, to strictly enforce sanitation provisions at stables and farms, to control meat stalls in the markets, and to prohibit the sale of meat of diseased bovines, etc.

Many places in the provinces have drawn good experiences from the use of indigenous medicinal plants for preventing and controlling epidemics, or for treating foot and mouth disease and indigestion in bovines, etc., and this knowledge has been widely disseminated among the people.

9213

### INSECTS INTRODUCED TO PROTECT CROPS

Praia VOZ DI POVO in Portuguese 16 Sep 81 p 4

[Text] The applied entomology laboratory of the Agrarian Studies Center located in S. Jorge dos Orgaos, built within the framework of bilateral cooperation between Cape Verde and the FRG, is beginning to register some promising results in its experiments related to crop protection.

To control one of the most serious threats to crops, the kale caterpillar (plutella xylostella), some hundreds of small insects (apantelles plutellas) that are natural enemies of the kale caterpillar were introduced last March in Santiago and distributed in areas of experimental kale cultures at the Justino Lopes (Santa Cruz) state enterprise. The results of this experiment show a progressive increase in the numbers of these insects, indicating that the species can adapt satisfactorily to our ecological conditions and leading to the belief that it could efficiently control the plague of kale caterpillars in Cape Verde in the future.

These parasitic insects will soon be introduced into other agricultural areas of the archipelago.

The entire program of experimentation in the field of crop protection that will be conducted in the S. Jorge laboratory is essentially aimed at establishing the method of integrated efforts, whose main objective is to reduce to a minimum the use of pesticides in the control of natural plagues by having recourse to biological combat, the use of plague-resistant varieties, new growing methods and crop hygiens.

### WHITE WORM ATTACK ON SUGAR CAME FIELDS DISCUSSED

### Uncertainty Regarding Species

Port Louis LE MAURICIEN in French 13 Aug 81 p 5

Text/ What is the exact extent of the white worm attack in our cane fields? This is the question currently being asked by those concerned and by the public in general. Although it is not yet time for terror, neither is it time for lack of concern. And our scientists are currently studying the problem. But they do not all seem to be in agreement on the question. While Dr Orian noted the presence in Solitude and Balaclava of numerous larvae which could be the Phytalus Clemora Smithi species, the MSIRI /Mauritius Sugar Industry Research Institute/, which has been taking surveys on the sugar properties since the announcement of a white worm attack in Reunion, thinks it is another insect. Jacques Dupont de Rivaltz de St Antoine, director of the Research Institute, is of the opinion that it is another white worm, this one attacking the dying or already dead cane stumps.

Adcording to Mr Dupont, it is quite common to note sporadic attacks by white worms, including those from Phytalus larvae. But the attacks have never been widespread until now. If the present attack has been noted in the north, it is because the farmers have opened their eyes following the events in Reunion (where, it is known, another white worm was discovered). However, there is also the fact, it seems, that the heat encourages the proliferation of the insect.

Whatever the reason, white worms have been found lately on a certain number of sugar plantations. In Highlands, they were found in the first shoots of the virgin cane. The infested fields have been burned and recovered with soil, following the recommended method. But are they the same worms as in the north? We do not know. However, a team from the MSIRI which came to Balaclava recently has gathered only larva specimens of the Alissonotum Piceum, the presence of which was noted by Dr Orian. It is doubtless this worm to which Mr Dupont is referring. According to the director of the MSIRI, the situation is under control and there is no cause for alarm. The fact remains, though, that the insect cannot be identified until it has reached the adult stage.

However, what seems to baffle Dr Orian is that he has found larvae in living canes and that they had even eaten the still green husk of many shoots. In order to determine exactly what insect this is, it would have required having laboratory-bred larvae for making a comparison. No one seems in a position to do that at the present time. If the larvae were Alissonotum, would the danger be less? The presence of this beetle was noted in the fields over a year ago. We wrote about it ourselves last year, and the presence of a large number of larvae tends to prove that there is a fresh outbreak.

Phytalus or Alissonotum, one fact remains: the Island of Mauritius is currently exposed to a serious attack of this type of insect. In fact, the insect larvae have absolutely no plants to feed on and must fall back on the sugar cane. The thick grass has practically disappeared, corn is no longer planted near the cane fields, and eupatorium, which also used to grow there, has been destroyed by herbicides without anyone thinking to replant it.

There is also the famous question of the destruction by parasites. Forty parasites of white worms have been introduced, of which half a dozen have been discovered to be effective. However, no parasites were found on the larvae gathered in the north. It appears that the parasites are threatened by the fire used to get rid of the straw. It is no doubt a question of a short term economy measure, but it risks being expensive in the long run.

### Immediate Action Urged

Port Louis LE MAURICIEN in French 14 Aug 81 p 4

Text/ In commenting yesterday on the statements made by MSIRI officials, Dr Orian, who at the beginning of the week had warned about white worm attacks in certain parts of the island, said he is convinced that the small yields in various regions cannot solely be accounted for by climactic conditions, such as the drought, for example.

White worms, like borers and, to a lesser degree, lice, also have their share of responsibility. The worms found in the fields are more than "scavengers": they have destroyed a whole field of virgin cane on the lands of the Nouvelle Industrie property, where they were found in the living plants. This means that effective methods of prevention are necessary.

Orian is of the opinion that we should not act as we did in the case of the white lice and go so far as to say that it is a question of a sporadic attack, because in Reunion the lice disappeared after a few months. It is all very well for the MSIRI officials to say that there is not a new outbreak of the Phytalus, Dr Orian told us. The present attack of white worms still needs to be controlled. In any event, the country is not safe from an attack of Phytalus: one

has only to see the quantity of adult insects that fly to Triolet or Reduit, to be aware that the danger exists. Even more so When an attack of White Worms is noted.

The fight against the insect-enemies of sugar cane should be carried out on all fronts, Dr Orian thinks, at the same time as efforts to bring our production to 800,000 tons. The mere fact that the larvae found in the fields have been devoid of parasites should motivate the Maurician scientists to react. We will return to this subject-

Studies, Information Deemed Necessary

Port Louis LE MAURICIEN in French 18 Aug 81 p 4

Text The sugar cane attacked by the white worm came from Pield 47 of the Nouvelle Industrie property. These are, as we know, living virgin canes, attacked while they were in full health. This kind of destruction has been noted in all parts of the island, especially in the warm, dry regions. Although the manufacturer-growers are in a position to destroy the plants that have been attacked and to turn over the soil to bring the larvae to the surface, one must ask oneself what margin of maneuverability the small grower has.

This means that all methods of controlling must be turned to account in this instance in order to prevent the white worm from propagating. The maximum amount of information is thus necessary. Are there modern methods of fighting against white worms? Methods other than insecticides, naturally. In any event, less onerous and less likely to kill useful insects. Do there exist any studies on Alissonotum larvae and their predators and parasites? Will the Tiphia Parallela attack the Alissonotum larvae? Can we obtain details on the Alissonotum larvae with a view to identifying them? Do we now have the means for a biological struggle on a national scale? There are so many questions that do not have an answer at the present time, and regarding which our scientists should inform the public.

Photo caption: The white worms are very active in the warm, dry regions.

11550 CSO: 5400

#### BRIEFS

OICMA SESSION--The 19th Ordinary Session of the Administrative Council of the International African Migratory Locust Organisation (OICMA) has ended in Freetown with recommendations and warning to Member States of the potentially dangerous development of locust population in Mali and the Lake Chad Basin. Among other things the Council observed with great concern the present gloomy financial situation of the organisation and appealed to member countries to make special efforts to meet their respective financial obligations so that effective preventive control against the African migratory locust could be achieved. In his closing remarks, the Minister of Agriculture and Forestry, Dr A. F. Joe Jackson congratulated the Executive Committee and delegates for conducting their deliberation with understanding. He highlighted the role played by Sierra Leone in the educational strides of the Sub-Region and added that the country felt honoured to host the session. Delegates from 14 African countries and technical experts and observers from the Food and Agricultural Organisation (FAO) also participated in the session under the chairmanship of the Ghanaian Agriculture Minister, Mr N. Y. Agbesi. [Text] [Freetown DAILY MAIL in English 1 Oct 81 p 8]

### NEW FORM OF ELM DISEASE HITS SOUTHEAST SCANIA

Stockholm SVENSKA DAGBLADET in Swedish 7 Sep 81 p 8

[Report by Lennart Lundegardh]

[Text] A tree-dwelling fungus has fastened a death grip on the elm forest of the Örup nature reserve in the Tomelilla tract of southeastern Scania. Adjacent large stands of elms on the Örup estate will also fall victim, and in time perhaps every elm in Scania.

It is an unusually aggressive form of what is called elm disease that has struck for the first time in Sweden. The elm disease that has been found, e.g., in the Stockholm zoo at least since the 1950's is easier to hold in check.

A group of experts is now considering what should be done.

Clean-cutting cannot eradicate the disease, but can slow down its spread. The problem is that under the regulations no measures at all can be taken in the reserve.

"The board of agriculture does have the legal authority to lift the prohibition. A decision on whether to do so will be reached shortly," says Maria Graberg, of the board of agriculture in Jönköping.

Reserve Is Center of Contagion

She has inventoried the spread of the elm disease around Örup. The picture is not entirely clear, although it is obvious that the reserve is functioning as a center of contagion.

"The elm forest of the estate, which is many times as large as the reserve, is also doomed," Arvid Örup, owner of the property, told SVENSKA DAGBLADET.

He feels that it is the old reserve (since 1912) that is to blame for the situation.

"There is no forestry work here; everything is left to rot away. In that environment the elm disease fungus has taken a step in its genetic development and become more aggressive," he asserts.

### Want To Continue

On the Orup estate they prefer to continue as before, to cut down the trees as soon as they die. That way it may be possible to find a market for the timber as pulpwood and for veneer. But clear cutting is too much to swallow.

"But the authorities will decide as usual," he says. "The trees will disappear in any case. It is sad that several generations to come will not get to enjoy this beautiful environment."

Elm disease is a scourge especially in the United States and the United Kingdom. No cure has yet been discovered. The fungus variant that is now affecting Scania is most reminiscent of that which is found in Poland and East Germany. There are theories that the disease started from there.

The Latin name of the fungus is Ceratocystis ulmi. It is spread by beetles, elm borers. The fungus grows in the wood and produces multitudes of slimy spores. The larvae of the bark borer gnaw passageways under the bark and get the spores on themselves. When the adult insect later flies out it takes the spores with it—to the next tree.

Thus the elms in the Örup reserve will die, but at the same time this opens the door for interesting field studies. The ground vegetation in this primeval forest-like area is being hurriedly charted right now.

The researchers want to see what will happen when the sunlight reaches the ground all year round. The assortment of species among the plants will change dramatically. But how? And can there be a return migration of the elm? And if so, when?

The answer lies in the future. We shall know in a few weeks whether the power saws will level the forests of the reserve and the estate with the ground this winter.



8815 CSO: 5400/2001

The new aggressive form of elm disease kills trees in only a few years.

### RAIL CARS RETURNING TO FINLAND INFESTED WITH COLORADO BEETLE

Helsinki HELSINGIN SANOMAT in Finnish 7 Sep 81 p 13

[Article from the city of Imatra]

[Text] The inspection of root pests has been made more efficient at the border stations of Vainikkala and Imatrankoski. Railway cars used for transporting uncleaned potatoes and roots are no longer received, but instead returned to the Soviet Union. This is done in an effort to prevent the feared colorado beetle from spreading into Finland.

The decision made by the National Board of Railways was based on the order made by the National Board of Agriculture according to which the closed cars that arrive from the Soviet Union cannot be sent further before they have been cleaned and if needed, disinfected. The National Board of Railways does not, however, have the staff for these cleaning jobs.

The railway cars that arrive in Finland are often very dirty. The bottom of the cars may be covered by a thick layer of dirt, mixed with potatoes and other roots. The bottom of the cars may also be covered with a layer of flour or lime.

All the cars are inspected at the Finnish border stations. The dirty or technically defective cars are returned. Out of the couple of hundred cars that arrive daily in the country about 10 percent are returned.

The reason for the intensified control at the border stations is that during the last few weeks in the cars that have arrived from the Soviet Union colorado beetles with black and yellow stripes have been found several times during the so-called technical inspection. Beetles were last found at Imatrankoski on 28 August and in Vainikkala a week earlier.

About 20 Cars Have Already Been Returned

The order regarding the return of dirty cars has been in force since Wednesday. By Friday about 20 cars had already been returned from Imatrankoski according to station master Eino Kononen. Kononen says that although it is against the international railway agreement to send cars that have not been cleaned, they have been accepted into traffic in our country because of the continuous shortage of railway cars. He believes it possible that the new order would make the rail car situation more difficult than before.

Chief of the Imatra traffic area K. Pokki told that the Imatrankoski station is prepared to clean up cars and disinfect them. The steam cleaner necessary is available at the local road authorities. The staff, two persons to do the sweeping and two for the disinfecting, can, however, not be taken out of the staff of the State Railways. The National Board of Agriculture has hired their own car inspector for the Imatrankoski station. The cars that have crossed the border are inspected by agriculture engineer Pekko Suomalainen who at the same time accepts or rejects the cars.

Suomalainen tells that apart from the colorado beetles he is also looking for potato tuberworm and he also sends all other bugs that are found to be studied. At the same time he takes soil samples that are tested in Tikkurila. The cars that contain soil are rejected without exception because according to the Law for Plant Protection the import of soil into Finland is prohibited.

According to general superintendent of the National Board of Railroads Panu Haapala, colorado beetles were among the matters discussed during the negotiations between railway authorities held in Moscow a few weeks ago. Then the Soviet representatives promised to clean the rail cars that go to Finland more efficiently.

The Soviet railway authorities have also been informed about the stricter inspection. Haapala assumed that it would hardly be possible to entirely eliminate having to send back the rail cars, but it seems likely that the cars are going to be in a cleaner condition.

Department head Jorma Rautapaa of the Plant Inspection Agency of the National Board of Agriculture considered the inspection that takes place at the border stations the most efficient means of preventing the colorado beetle from spreading. "From our standpoint it is good if the cleaning up of the cars can take place on the Soviet side," he said. Until now it has been possible to avoid the colorado beetle in Finland. It has not been found in nature in our country. It has been found several times in the goods cars that have arrived from the Soviet Union. It has likewise been found in some vegetable loads that have arrived from Eastern Europe.

The potato pest that is known as the colorado beetle came in the 1920's to Europe from North America where it had spread from Mexico.



Station master Eino Kononen (left) and agriculture engineer Pekka Suomalainen are studying at the Imatrakoski station what can be found on the floor of a dirty rail car.

9662

CSO: 5400/2202

END

# END OF FICHE DATE FILMED 29 Oct. 8/

JPRS 79310 27 October 1981

### Worldwide Report

**EPIDEMIOLOGY** 

No. 252



FBIS FOREIGN BROADCAST INFORMATION SERVICE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports
Announcements issued semi-monthly by the National Technical
Information Service, and are listed in the Monthly Catalog of
U.S. Government Publications issued by the Superintendent of
Documents, U.S. Government Printing Office, Washington, D.C.
20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

## WORLDWIDE REPORT EPIDEMIOLOGY

No. 252

### CONTENTS

### HUMAN DISEASES

BRAZIL		
	Arcoverde Demands Resources To Avoid Dengue Epidemic (0 GLOBO, 5 Oct 81)	1
CUBA		
	Country Continues Anti-Dengue Campaign (Various sources, various dates)	2
	Ramirez Cruz ANAP Message, by Jose Ramirez Cruz 'TRABAJADORES' Editorial Trade Union Activities, by Rebeca Antunez National Wrap-Up, by Reynold Rassi, et al. WHO Director Hails Efforts, by Jose A. de la Osa Pesticides Used, by Susana Lee Provincial Measures Soviet Aid, by Adolfo Gomez Gonzalez	
FINLAND		
	Pogostan Virus Spreads, More Than 100 Patients With Cutaneous Lruptions (HELSINGIN SANOMAT, 11 Sep 81)	13
GUYANA		
	Briefs Malaria Control	17

### INDIA Briefs Gastroenteritis in Raipur 18 Cholera Epidemic Reported 18 INDONESIA Brieis Gastroenteritis in Southeast Maluku 19 TRAN Briefs Cholera Cases Reported 20 MALAYSIA Typhoid Outbreak Reported in Perak State (NEW STRAITS TIMES, 13, 17 Sep 81)..... 21 Three Settlements Affected Twenty-six New Cases Dengue Reported in Johore, Cholera in Perak (BUSINESS TIMES, 3 Sep 81; NEW STRAITS TIMES, 2 Sep 81)...... 22 Dengue Under Control Two New Cholera Cases MOZAMBIQUE Briefs Anti-Mosquito War 23 NEPAL Briefs Rabies Kills Three 24 PAKISTAN Briefs

(THE BULLETIN TODAY, 28 Sep 81)......

25

26

Spinal TB on Increase

Cholera Epidemic Feared in Cagayan

PHILIPPINES

### TURKEY

Shortage of Doctors Noted in State, SSK Hospitals (CUMHURIYET, 29 Jul 81)	27
VENEZUELA	
Briefs Measles Outbreak	29
YEMEN ARAB REPUBLIC	
Health Ministry Official Discusses New Developmental Plans (Ahamd 'Ali al-Khadar Interview; AL-MADINAH, 26 Aug 81)	30
ZAIRE	
Briefs Dysentery Epidemic	33
ANIMAL DISEASES	
INTER-AFRICAN AFFAIRS	
Conference Discusses Combat of Epizootic Diseases (LA NOUVELLE MARCHE, 9, 14 Sep 81)	34
Preparatory Meeting Final Communique	
INDONESIA	
Briefs Jembrana Disease in Denpasar Blackleg in Brahman Cattle From Australia	37 37
MAURITIUS	
Research To Control 'Stomoxys Nigra' Reported (LE MAURICIEN, 1 Aug 81)	38
NIGERIA	
Briefs Cattle Vaccinated	40

### VIETNAM

Regulations on Animal Epidemiologic Control Issued	
(NHAN DAM, 29 Aug 81)	41
Song Be Stamps Out Bovine Epidemics (QUAN DOI NHAN DAN, 31 Aug 81)	44
PLANT DISEASES AND INSECT PESTS	
CAPE VERDE	
Insects Introduced To Protect Crops (VOZ DI POVO, 16 Sep 81)	45
MAURITIUS	
White Worm Attack on Sugar Cane Fields Discussed (LE MAURICIEN, 13, 14, 18 Aug 81)	46
Uncertainty Regarding Species Immediate Action Urged Studies, Information Deemed Necessary	
SIERRA LEONE	
Briefs OICMA Session	49
SWEDEN	
New Form of Elm Disease Hits Southeast Scania (Lennart Lundegardh; SVENSKA DAGBLADET, 7 Sep 81)	50
USSR	
Rail Cars Returning to Finland Infested With Colorado Beetle (HELSINGIN SANOMAT, 7 Sep 81)	53

### ARCOVERDE DEMANDS RESOURCES TO AVOID DENGUE EPIDEMIC

PY071353 Rio de Janeiro O GLOBO in Portuguese 5 Oct 81 p 4

[Text] Brasilia (0 GLOBO) -- The dengue epidemic recorded in Cuba—which up to 9 August has affected 342,000 persons with 160 deaths—has led Health Minister Waldyr Arcoverde to ask the Planning Ministry for extra-budget resources to establish an emergency plan next year to fight the medes aegypti mosquitoes, carriers of the disease that are also responsible for the urban yellow fever. According to Health Ministry data, unconquered concentrations of these mosquitoes exist in the cities of Rio de Janeiro, Salvador and Natal.

According to Pedro Tauil, director of the Department of Eradication and Control of Endemic Diseases, of the Superintendency for Publish Health Campaigns [SUCAM], although the infestation rate in these three cities (Rio: 0.54 percent; Salvador: 0.09 percent; and Natal: 0.06 percent) is far below the rate considered to be a risk for the transmission of urban yellow fever and of dengue, the presence of the mosquito remains as a real menace, and the intensification of control measures becomes more urgent in view of the outbreak of the epidemic in Cuba.

Explaining that the ministry considers any percentage above 4 percent a risk of epidemic, Tauil stated that although SUCAM is succeeding in reducing the rate of infestation in Natal and Salvador, they are not having the same success in Rio de Janeiro where the difficulties are greater due to the size of the city, to the large number of buildings and to the difficult access to certain areas such as the slum areas. According to Health Ministry data, infestation in Rio de Janeiro in June reached 2.6 percent, a percentage considered very high by technicians of the Yellow Fever Department.

### COUNTRY CONTINUES ANTI-DENGUE CAMPAIGN

### Ramirez Cruz ANAP Hessage

Havana GRANMA in Spanish 20 Jul 81 p 3

[Message from Jose Ramirez Cruz, president of ANAP [National Association of Small Farmers]; date and place not given]

[Text] Before the triumph of the revolution, when epidemics raged and diseases ran rampant in our rural areas, when thousands died because of a lack of medical care or medicines, the rulers in power remained indifferent. Today, with the appearance and spread in our country of the disease scientifically known as "dengue," a malady transmitted by the Aedes aegypti monquito, our party, backed by all the people, heads up the fight to protect the health of every citizen and above all, our children.

Since the first outbreak of the disease, government institutions and mass organizations have taken urgent measures to eradicate this epidemic and the Aedes aegypti mosquito, its carrier.

For that reason, the National Association of Small Farmers, working in keeping with the orientations of our party and government, is doubling its efforts to fight the disease. Every rural man, woman, senior citizen and child should intensify his support for the measures outlined in order to eliminate this disease that affects the population and undermines the productive capacity of our workers.

For that reason, every Agricultural and Livestock Cooperative (CPA), every credit and services cooperative and every farmers association must continue to organize our action and efforts, for which purpose we have set up leadership teams in charge of carrying out this activity in every rank-and-file organization, which will be headed by the chairman of the leadership junta or board of directors, the secretary of education and the head of the agitation and propaganda commissions, the health activist and the sanitary activist of the FMC [Federation of Cuban Women] delegation.

The establishment of work brigades in all renk-and-file organizations, which will be responsible for mobilizing for the elimination of mosquito breeding grounds by spraying, the use of the chemical abate, clearing, use of oil in stagnant water and other activities, will be headed by the National Operations Group.

Every rank-and-file organization will set up the work brigades it deems necessary, based on its own individual needs.

The control and inspection committees set up will be in charge of visiting housing units and possible breeding grounds of mosquitoes in order to verify whether control measures have been applied with the proper care.

They will engage in this activity using the resources of our rank-and-file organizations, such as sprayers, tractors, carts and other support means used in the task.

They will work in coordination with the People's Government health sector in order to hold lectures relating to measures aimed at the elimination of dengue and the eradication of the mosquito, as well as health debates and sanitary meetings.

We must carry out all the guidelines and every farmer must become an active soldier in the destruction or elimination of real or potential breedings grounds of the Aedes aegypti.

We must all be aware of this attitude and continually practice these measures in every collective.

With the cooperation and responsibility of everyone, we are sure that we shall win this fight against the epidemic through the eradication of the mosquito and the elimination of dengue.

Every rural family, from the leadership team, work brigade or control and inspection committee, on farms and in the homes, must constitute a center of constant vigilance in order to protect the environmental hygiene and sanitation of our rural areas.

It is the task of our provincial and municipal leaders to exert rigorous control over the measures set forth and go further in the task of spreading information so that it will become a mass activity, the only way of achieving victory in this important and human task.

We are confident of success in this new battle of the people, now in defense of the collective health.

### 'TRABAJADORES' Editorial

Havana TRABAJADORES in Spanish 21 Jul 81 p 1

### [Editorial]

[Text] A sustained and systematic effort requires that the trade union accement carry out the sanitation measures indicated by the public health organizat on in the current phase of the campaign against the Aedes aegypti mosquito, the carrier of dengue.

In a recent speech, Comrade Roberto Veigs, secretary general of the trade union confederation, revealed the program of measures to be undertaken by the CTC [Central Organization of Cuban Trade Unions] and its unions on this occasion. Veiga said that the contribution which the trade union movement could make to the fight against the causes of the epidemic is truly substantial. "Our workers and union leaders must demand of the administration the eradication of potential mosquito breeding grounds and the application of measures set forth," he emphasized.

Veiga added the need for active participation in the sanitation and hygiene measures so that our work centers may declare themselves free of breeding grounds of the Aedes aegypti mosquito.

The most recent information on development of the campaign indicate that the measures being taken are the right ones. This is the time for a special effort for the creation of hygienic and sanitary measures making it possible to eliminate the carrier, an effort on a part with the one being made by the country to eliminate the epidemic.

The self-inspection to be made at work centers will make it possible to see the problems that have already been solved and detect others that may have been neglected. The participation of workers in learning the difficulties, as well as ascertaining what measures may be used to eradicate them, is a true mass solution to problem requiring the action of each and every one of us.

It is not a question of inspecting centers in order to enumerate problems, but rather, in order to learn how to solve them, how much remains to be done and which problems have not been solved.

Union officials must watch and ensure that this is done and that problems are solved.

Using the production or service assemblies will enable all workers to be familiar with them and help with their solution. The administration must take measures in order to provide solutions for problems that exist.

It must be noted that there are many conditions for the reproduction of the mosquito and we need to set up the machinery for a continuing, systematic fight against the carrier, in homes, units, establishments, and so on, especially since our work centers are in populated areas and are part of them, not isolated. Negligence would undermine the local measures adopted to wipe out the carrier.

Those centers which, because of their nature, produce large quantities of waste in the way of raw materials, scrap and other materials that become breeding grounds and potential hotbeds of the Aedes aegypti, require action that sometimes they cannot provide themselves. Consequently, the participation of municipal or provincial organizations becomes indispensable.

This phase of work requires better quality and two aspects are needed: The trade unions must report and demand the eradication of breeding grounds and the government administrations must do what is stipulated by Public Health.

A number of events, serving as a prelude to the work of thousands of men and women who will make a decisive contribution to this major campaign, were held throughout the island's municipalities yesterday.

The following is a summary of yesterday's events, based on the latest information that has reached our staff.

### Guillermo Garcia in Cardenas

Matanzas (AIN)—Maj Guillermo Garcia, member of the Politburo and the Central Committee of the party, presided over the ceremony marking the beginning of the intensive phase of the campaign against the dengue epidemic in Cardenas.

Leonides Gonzalez, president of the People's Government Municipal Assembly and head of the operations group of the campaign, spoke of the need to wage the battle with fervor equal to that which our people have demonstrated, generation after generation.

Officials introduced the nucleus of the party and rank-and-file committee of the UJC [Union of Young Communists], who now form the brigade that will be in charge of work for this second phase.

Jose Luis Rodriguez, first secretary of the party in the municipality, spoke at the closing session to sum up the antiepidemic work done in Cardenas since the first outbreaks of the disease and in compliance with the guidelines of the provincial operations group.

Similar ceremonies were held simultaneously at 0900 hours in the 14 municipalities of Matanzas, where the intensive phase of the campaign is already underway.

#### Havana

With a ceremony held in Carlos J. Finlay Park, named after the famous Cuban scientist who discovered that the Aedes aegypti mosquito was the carrier of yellow fever, the intensive campaign against the insect that will be waged throughout the country got underway.

Over 300 workers who will work in the campaign in the municipalities, including health and support personnel from political and mass organizations, were present at the ceremony. Those who will work full-time in the campaign against the mosquito wore their new uniforms.

Jose E. Mederos, first secretary of the party in the Central Havana district, summed up the ceremony, emphasizing that this battle against the Aedes aegypti is also a battle against imperialism and that our people will emerge victorious from this one as well. He said that on a day like today, standing before the statue of the scientist Carlos J. Finlay, the commitment is that not one housing unit or building will go without being fumigated in this intensive campaign and that high-quality work will be done in this decisive struggle against dengue and its carrier.

Indifference cannot be the response to the appeal made by the CTC and its affiliated unions. Workers must not remain silent in the face of repeated failures on the part of some government agencies. There is no other alternative.

Let us all work to make our centers free of the Aedes aegypti mosquitoi

### Trade Union Activities

Havana TRABAJADORES in Spanish 21 Jul 81 p 1

[Article by Rebeca Antunez]

[Text] Since yesterday, there have been union self-inspections at all work centers in the country in order to ensure the smooth operation of dengue epidemic control measures and eradication of the carrier, the Aedes aegypti mosquito, a task that will last until 31 July.

This information was released at a press conference by Adolfo Valdivia, general secretary of the National Union of Health Worekrs and a member of the national committee of the workers confederation for the campaign to eradicate the mosquito.

During the self-inspections, each work center will have to detect possible breeding grounds for mosquitoes, sanitary and hygiene problems, ensure compliance with the spraying plan and the cleanup of warehouses and storage areas and enforce measures set forth by the Hinistry of Public Health.

According to Valdivia, the result of the self-inspections must be discussed by the union with government agencies and solutions must be demanded more energetically.

Through production assemblies, workers will subsequently be informed as to progress on the campaign at their respective labor centers.

Valdivia, who is also a member of the party Central Committee, reported that on 19 August, a meeting of the National Committee of the CTC will be held to evaluate the entire self-inspection process, to take place the last 10 days of each month.

Valdivia said that in order to give incentives to those who do comply with measures, a certificate will be issued to centers declaring themselves free of the Aedes aegypti. In conclusion, he stressed the work of innovators and rationalizers who have put their knowledge in the service of the campaign.

### National Wrap-Up

Havana GRANMA in Spanish 4 Aug 81 p 3

[Articles by Reynold Rassi, Herminio Reynaldo Reyes, Aldo Isidron del Valle and Joaquin Oramas]

[Text] The intensive phase of the program to eliminate the dengue epidemic and eradicate the Aedes aegypti mosquito began yesterday throughout the country.

This marked the beginning of a fight of extreme importance to the nation in the field of public health.

Also presiding over the ceremony were Nelson Negrin, president of the People's Government Municipal Assembly in Central Havana, Lt Col Guillermo Penalver, from the National Antiaegypti Campaign Group, Dr Luis Martinez, municipal director of public health, and other officials from organizations and leaders of mass organizations.

Health and support personnel later went to the operations bases where they had their spraying equipment: hand and automatic sprayers, and went about preparing the 95-percent malathion and filling their equipment. The representatives of the campaign in Central Havana then began their spraying work on the edge of the municipality, house by house, in areas divided up into blocks.

Las Tunas--The second phase of the intensive attack on the Aedes aegypti mosquito, the carrier of dengue, also began with ceremonies in the eight municipalities and the support of the political and mass organizations in the province.

Yesterday, spraying began inside and outside houses and buildings in the municipalities in order to destroy possible breeding grounds and adult mosquitoes.

In the fight to the death against the carrier of dengue, 574 comrades are participating. They were trained by the Ministry of Public Health and in the 5 weeks that this phase will last, they will have the help of all the people in the intensive fight against the Aedes aegypti.

Rodolfo Puente Ferro, alternate member of the Central Committee and second secretary of the party in the province, attended the meeting held in the Mario Munoz Health Polytechnical School in Las Tunas.

### Villa Clara

Santa Clara-Today, Tuesday, the campaign against the Aedes aegypti mosquito moved into the second day of action in this intensive phase that will mobilize broad groups of our population. Yesterday, assemblies were held in the 13 municipalities of Villa Clara to kick off the battle against the dangerous carrier of diseases.

Here, Elia Garcia Pa ino, second secretary of the party provincial committee, other political leaders and representatives of mass organizations and the operations group at the higher and municipal level, presided over the meeting held to begin the battle and to send off the brigades that will participate in it.

Among those in attendance were the members of the sanitary forces, in uniform and with their sprayers and other equipment. With the help and cooperation of the people, they are undertaking their battle against the mosquito.

The municipality has 170 pieces of equipment to be used in the spraying of homes and nearby areas. At the park were the home sprayers, mobile machines and hand sprayers, with the necessary means for environmental treatment.

GRANMA was also informed that in the remaining municipalities, following the solemn ceremony marking the opening of the battle, brigade members began their fumigation in accordance with the program outlined.

The provincial operations group stated that all personnel participating in the action received proper training. Since yesterday, the home fumigation plan has been stepped up through the use of mobile spraying equipment to be used on homes and surrounding areas.

Alfredo Nieto, president of the People's Government Municipal Committee and chairman of the operations group at that level, said that in Santa Clara, 285 workers, including 22 women, had been trained.

In addition, Law 27 of this year continues to be applied to those who violate sanitary measures. By 2 August, fines had been issued to over 4,000 centers, organizations and homes.

### Attack on the Aedes

The thorough attack on the Aedes aegypti mosquito began yesterday in the municipality of Plaza, with the participation of some 300 health workers, including persons operating automatic and hand sprayers and inspectors. They moved out into the 13.2 square kilometers of the territory in order to complete the intensive phase of the program to eliminate the carrier of dengue.

After a brief ceremony at Calixto Garcia Hospital, persons working full-time in the campaign against the Aedes aegypti, wearing their light blue uniforms, and the large group of workers mobilized by the party and the UJC to support their work, went to the gathering point at B and 13 in Vedado, where the hand and automatic sprayers were distributed. There they received their last organizational instructions. By the afternoon, they had already left for different zones in order to begin their necessary work, house by house, in order to spray 45,914 homes and buildings in one month.

Dr Otto Pantoja, director of public health in the municipality, informed GRANMA that both full-time and support personnel have been properly trained to carry out the campaign successfully. All are identified and those not in uniform (support personnel) have arm bands and identification cards.

The personnel, divided into brigades, began their work in different spots in the municipality. The first brigade, equipped with automatic sprayers, began in the northern area, following the blocks of homes from 1st and 12th streets. In that area, 57 automatic sprayers are being used, each operated by two workers who take 45-minute turns doing the spraying.

This brigade, which is using an insecticide to kill adult mosquitoes, will reach the last blocks, located around the La Tropical Gardens, in around 10 days.

At the same time, another brigade with full-time personnel, left from the vicinity of La Tropical and is moving north, spraying with a substance that kills both mosquito larvae and adults.

A third contingent will work from 0500 to 0900 hours in the morning and from 1700 to 2100 hours at night in the fight against adult mosquitoes, leaving from the center of the municipality and moving toward different points.

The inspectors brigade will then carry out their statistical survey in order to verify how far the campaign has progressed and find any mosquito breeding grounds. They will visit 30 percent of the 790 blocks and 20 percent of the 45,914 homes and buildings to be funigated in Plaza. The campaign will also have the participation of a special high-power spraying team from the FAR [Revolutionary Armed Forces], which will work at night and early in the morning.

"We shall wage this campaign just as we have done on memorable occasions in defense as well as production," said young inspector Odalys Borrego, speaking on behalf of her comrades at the ceremony held at Calixto Garcia Hospital to kick off the campaign, a ceremony summed up by Juan Nestor Lima, first secretary of the party in the municipality.

### WHO Director Hails Efforts

Havana GRANMA in Spanish 5 Aug 81 p 1

[Article by Jose A. de la Osa]

[Text] Dr Halfdan Mahler, general director of the World Health Organization, said yesterday that "the strategy outlined by the Cuban Government in the fight it is waging against dengue and the Aedes aegypti mosquito is an extremely valid one and I am sure that Cuba will be successful in its efforts.

"In order to eradicate the Aedes," he said, "it is not enough to know techniques and methodologies, but rather, there must also be enthusiasm in the application of technical measures."

Mahler then added that "for me, this is the most important thing and it is what I have observed in this country: the combination of technical knowledge and enthusiasm in the application of measures outlined."

The statements by Dr Mahler were made during his return flight to Havana on a Yak-40 following a visit he made to care centers in Granma Province, accompanied by Dr Sergio del Valle, member of the Politburo of our Communist Party and minister of public health.

The general director of the WHO said that the fight being waged in all the country's hospitals is also very important, hospitals "where the best care is being given to all dengue victims."

"Once more, I would like to say that we have observed that the Cuban health workers are demonstrating tremendous awareness of their responsibility and feel constantly motivated. In this epidemic, they have done everything humanly possible to save the life of every sick child," Dr Mahler concluded.

### Pesticides Used

Havona GRANMA in Spanish 5 Aug 81 p 1

[Article by Susana Lee]

[Text] "I believe that if a country can eradicate this mosquito, that country is Cuba, because of its organization, the cultural level of its people and the spirit of discipline and work that our people have." (Fidel, 26 July, Las Tunas)

The campaign to achieve this goal is not only based on the more than 13,000 members of the new health army that will begin its work throughout the country in this intensive phase against the Aedes aegypti: visitors, fumigators, inspectors and supervisors.

Nor is it based on the millions of pesos invested — almost all in convertible currency — in Abate, Baytex, malathion, DDT and other pesticides, as well as in hand and automatic sprayers, Tifas, Lecos and other transport equipment and spare parts.

The fight against the tiny carrier of dengue and other diseases is mainly based on the work done by the masses to achieve thorough sanitation of urban and rural zones.

Much has been said in recent days about sanitation and yet, we have perhaps not considered its most precise dimension. Sanitation means environmental and domestic hygiene and consequently, it involves many, many aspects of our life in the home, at school, at work centers and our surrounding area, on the bus we take, the shop where we buy our food, the beach and restaurants we visit.

At times we confuse the word and think almost automatically about throwing away what we do not need, but it is not merely a matter of that.

Although we shall continue to emphasize the topic in later columns, we are giving here the main instructions on sanitation from the head of the National Operations Group, Sergio del Valle, member of the Politburo and minister of public health.

What we are dealing with is the sanitation of cities, rural areas, work centers in general (meeting places, transport terminals, care centers and schools, domestic trade centers, warehouses, slaughterhouses and other sites), sever systems, and in rural areas, livestock raising units for all types of animals, agroindustrial centers, isolated housing units, cooperatives, agricultural and forest enterprises and others.

The specific measures for working in this phase are:

- 1) thorough cleaning and clearing of all patios, yards, barren land, plots of land, perimeters (5 meters minimum) around homes and housing units, cities, storehouses, work centers and other sites;
- 2) cleaning of flat-roofed houses, garages and other places with difficult access;

- 3) the elimination by proper final disposal (in dumps, incineration, and so on), of all junk and trash, building materials scrap and other waste inside or within a 50-meter radius of all the sites mentioned. In the case of useful materials, proper organization must be used. All brush and weeds must be eliminated.
- 4) cleaning of sewer systems;
- 5) elimination of unauthorized garbage dumps;
- 6) cleaning and clearing of ditches and irrigation channels; and
- 7) proper organization of all types of storehouses, including storage areas on farm units, feed-manufacturing plants and wool-packing areas, as stipulated.

With respect to what was done on Monday, the day the intensive phase of the fight to eradicate the Aedes aegypti and eliminate the dengue epidemic began, one must point out that only 85.7 percent of the cases rean during the day were admitted, which does not correspond to the orientations given to admit all in order to provide proper treatment and help check the chain of transmission of the disease.

It was reported that the provinces with the lowest percentages of patients admitted were Las Tunas, Holguin, Granma, Villa Clara, Santiago de Cuba and Ciego de Avila, all with figures under 80 percent of the total number of cases seen.

Fines were imposed at 289 conters because of failures to comply with the sanitary measures set forth.

It was observed at certain locations that both the permanent brigades and the fumigators making home visits and treating housing units are behind because of beginning their tasks at work centers. It was therefore suggested to the municipal operations groups that, taking advantage of the daily program of visits, the corresponding agencies and administrations should first be notified so that preparations might be made and the work improved.

We repeat that improving work does not mean hurrying, meeting goals, increasing the number of regulations. Quality and optimum use of resources provided for the campaign and this phase in particular are the words of the day.

### Provincial Measures

Havana JUVENTUD REBELDE in Spanish 7 Aug 81 p 1

[Article by L. H. S.]

[Text] In a massive response to the orientations issued by our commander in chief on 26 July, all provinces are reporting a relentless fight against the current epidemic of dengue and tenacious efforts to wipe out or at least reduce to the maximum extent the existence of the mosquito that carries it.

The National Operations Group emphasizes the importance of guaranteeing strict attention to brigade personnel carrying out the intensive attack in the present phase of this fight against the carrier of dengue.

It has been reported that a proportional reserve of automatic sprayers is now being set up in the municipalities so that they may be repaired without delay. Workshops are operating to serve the teams, giving priority to immediately resolving any breakdown.

In order to avoid delays, a system has been created through the CDR [Committees for the Defense of the Revolution] to notify work centers and residents of areas that are going to be treated one day ahead of time.

This will make it possible to give proper protection in the home to television sets, refrigerators and food so that they will not be contaminated by the insecticides and so that all conditions may be created for effective treatment.

The previous notification of visits will also make it possible for administrators of the centers to help the brigades, facilitate their work and if necessary, adopt protective measures where required.

From 8 to 22 August in Pinar del Rio, an intensive sanitation phase will take place in all work centers. For this purpose, municipal meetings will be held to establish commitments along this line.

The FMC [Federation of Cuban Women] in Havana City, with its senitary brigade members, has held 1,672 talks, lectures and health debates and updated 1,336 murals on the topic.

Together with the CDR in the province, 33,356 readers of texts prepared by the Ministry of Public Health were held.

Sanitary brigades in Sancti Spiritus are working to clean up cities, rural communities, agricultural and industrial centers, housing units and homes, sewer systems and places with difficult access.

CDR members in Granma Province have cleaned out debris and brush, 4,950 lots, plots of ground and yards and have visited over 50 work centers. In addition, they have held 110 special health meetings at the CDR level and applied 51 penalties to violators of Decree Law 27.

Party leaders in Las Tunas have arranged to check work there more completely by brigade heads in each area in order to help eradicate difficulties immediately.

In Holguin, a brigude of plumbers has been set up to solve problems with water outlets and thereby avoid possible breeding grounds of mosquitoes in the provincial capital.

A total of 125 women passed the carrier inspector course and have begun to work in Santiago de Cuba in this intensive phase of fighting dengue and its carrier.

They will make the entomological surveys aimed at verifying and locating sites where there still exist larvae and adult mosquitoes.

In that province also, men trained as sprayers have been working since 3 August to complete intensive fumigation of all areas. A new treatment phase with Abate began in the entire province yesterday, as arranged.

On the Isle of Youth, safety measures were analyzed in connection with the intensive sanitation day planned in work centers and homes in the municipality for this weekend.

### Soviet Aid

Havana JUVENTUD REBELDE in Spanish 18 Aug 81 p 1

[Article by Adolfo Gomez Gonzalez]

[Text] At precisely 0259 hours this morning, the first fumigation equipment out of a lot of 50 pieces of equipment donated by the Soviet Union to our country for the campaign being waged to eradicate the Aedes aegypti mosquito arrived on Cuban soil at the port of Mariel.

The equipment is that mentioned by Fidel at the closing session of the assembly celebrating the 28th anniversary of the attack on the Moncada Barracks, held in Las Tunas.

All the equipment will immediately be incorporated into the second phase of the campaign against the mosquito that carries the dengue epidemic in our country.

This help from the USSR resulted from the difficulties Cuba faced in acquiring equipment to fight the Aedes aegypti mosquito, a fight in which, as Fidel said, the nation has spared no efforts or economic sacrifices.

The high-quality Soviet equipment was given to us.

One group of equipment is automatic and each machine can fumigate 300 blocks in only 3 hours. This was demonstrated in the tests done with other machines already in Cuba.

In order to give an idea of their high productivity, it can be said that if one compares the machines with similar ones from capitalist countries, such as those now in use, the possibilities are tripled.

The other type of equipment that is part of the shipment is portable and weighs about 70 kilograms. Its efficiency is also very high because two of them mounted on a traffer exceed the work capacity of one self-propelled machine.

Mixers for preparing the insecticide in the proper proportions also arrived.

Captain of Boat

Leonid Rybak is captain of the Soviet boat that brought the cargo. He is an old friend of Cuba who already knows nearly all the country's ports because of his countless visits made since 1960.

"In its fight for peace, socialist Cuba is not alone," he said. "Imperialism does not frighten it with its attacks, nor can it force it to change the path chosen by its people. Today, we proudly do our internationalist duty."

Rybak explained that when roads were being built in the taigs in his country, this type of equipment was used with great success.

Honor and Pleasure

For Lorenzo Jorrin, chief of operations of Brigade 2 at the Port of Havana, who now works in Mariel, unloading the boat bearing the solidary message of the brother nation of Lenin is a great henor.

"It is also a pleasure for our group to unload such valuable cargo," he said. "In this way, we also make a contribution to this battle of everyone."

11,464 CSO: 5400/2206 POGOSTAN VIRUS SPREADS, MORE THAN 100 PATIENTS WITH CUTAMEOUS ERUPTIONS

Helsinki HELSINGIN SANOMAT in Finnish 11 Sep 81 p 13

[Article: "Pogostan Disease Spreads in Northern Karelia, More Than 100 Skin Eruption Patients in Ilomantsi"]

[Text] Joensuu—The peculiar fever—with cutaneous eruptions, which was observed by Ilomantsi Health Center Physician Pasi Kuusisto in the middle of the 1970's and which has been named the Pogostan virus, is running rampant this fall to a greater degree than ever before and over a more extensive area.

More than 100 patients have come for treatment of this skin eruption at the Ilomantsi Health Center. In addition to cutaneous eruptions, the virus manifests a fever and pains in the joints.

Kuusisto stated that the same disease has been observed this fall in the areas of Kuopio, Mikkeli, and Jyvaskyla, among other places. In addition to Ilomantsi, it has also appeared elsewhere in Northern Karelia.

At the Ilomantsi Health Center patients are given treatment instructions and specimens are taken, which are sent to the work group directed by Docent Markus Brummer-Korvenkontio in Helsinki University's Institute for the Study of Viruses.

"The purpose is to isolate the virus, which is suspected of causing this disease. It is possible that the disease is spread by a kind of guat, but what kind, has not been determined," stated Kuusisto.

prummer-Korvenkontio came to Ilomantsi in late summer and collected the first specimens of gnats. The collection of specimens will continue in Ilomantsi throughout the fall as long as gnats continue to fly.

Brummer-Korvenkontio stated that the same type of disease was also observed in Sweden in the 1970's, but the Swedes have discontinued the study of the disease. Now the intent in Finland is to take advantage of the materials previously collected in Sweden.

A completely new type of virus may be in question. "It is now already known to which group the virus belongs. It has a cross reaction with an African virus," stated Brummer-Korvenkontio.

Viruses belonging to the same group caused extensive epidemics in Africa and Australia in the 1950's. At a certain scientific congress in Paris Brummer-Korvenkontio heard that diseases of the Pogostan virus type were also appearing in Central Europe.

The studies now begun in Finland may last years. If it turns out that a new virus is found, it would be the fourth virus to be found in Finland. There are approximately 400 registered viruses in the world.

The results of this research will be sent to United States where the registration center will study and compare them to all virus studies as well as give the virus a name. In general, the name given is that of the place in which it was found. In this case it was Pogosta.

10576

CSU: 5400/2207

MALARIA CONTROL -- The Ministry of Health has announced that there has been a decrease in the incidence of malaria in Guyana during the past few months. From January to May, 1981, the number of cases reported was 1,110 in comparison with 1,650 for last year during the same period. According to Government Chief Medical Officer, Dr. Walter Chin, the reduction in the number of malaria cases was due to a number of factors. Apart from the mass drug treatment that was undertaken last year in the Rupunumi area, Dr. Chin said that there was an intensification of a campaign aimed at ensuring that houses were sprayed with DDT insecticide. He also added that health officials in the country have continued their efforts to detect cases of malaria and treat patients promptly in order to avoid carriers of the disease. But Dr. Chin claimed that some diseases such as influenza and perhaps malaria, have a cycle. At times they are very prevalent while on other occasions there is a marked drop in the number of cases. And the Chief Medical Officer feels that we in Guyans are probably experiencing the period when malaria is on the decline. He said that health workers are optimistic that the disease will continue to drop in its incidence for the rest of the year. [Text] [Georgetown GUYANA CHRONICLE in English 2 Sep 81 p 11]

GASTROENTERITIS IN RAIPUR—Raipur, September 20—Raipur district has been declared an epidemic-hit area, as 12 people have died of gasteroenteritis in the Dhamatari subdivision in the last few days. The district administration has launched a massive inoculation drive. [Text] [Bombay THE TIMES OF INDIA in English 21 Sep 81 p 9]

CHOLERA EPIDEMIC REPORTED--Cholera in an epidemic form has so far claimed two lives in the Barisaudpur area of Bihar, official sources said. Another 10 persons were seriously affected and admitted to hospital. UMI [Text] [Calcutta THE STATESMAN in English 21 Sep 81 p 13]

CS0: 5400/7001

GASTROENTERITIS IN SOUTHEAST MALUKU -- In the government center of Aru, Dobo Subdistrict, Southeast Maluku, 22 persons died and 160 others are seriously ill with gastroenteritis. Dr Abiyoso, chief of the Dobo Public Health Center, in his report to the chief of the Regional Level Bealth Service, Southeast Maluku, said the disease attacked the population of Marlasi and Kabuten Villages, which are located far from any health services. It is, therefore feared that the disease will spread unless it is suppressed immediately. The health official also said that prior to the outbreak of this disease in Aru, Dobo Subdistrict, it killed 40 persons in Phoirenan Village, Kei Besar Elat Subdistrict, and Abean Village in the Kei Kecil Tual Subdistrict. The disaster also caused a loss of voters for the coming 1982 general election. Information obtained from the Level II Regional Election Committee of Southeast Maluku indicated that a number of gastroenteritis victims had voting rights or could have been elected but no actual figures were provided for the drop in the number of voters in this area. The committee estimated a loss of 50 votes in the Babar, Tepa Subdistrict, a loss of 10 votes in Tanimbar Utara, Larat, 10 in Elat, 18 in Tual, 20 votes in Dobo. The number of deaths from other diseases has not yet been calculated. Meanwhile gastroenteritis broke out for the first time in the first class city of Sukabumi, attacking nine persons between 2 and 60 years of age between the last ween of June and the first week of July. [Excerpts] [Jakarta MERDEKA in Indonesian 22 Jul 81 p 1] 6804

CHOLERA CASES REPORTED—Tehran, 8 Oct (AFP)—Twenty-eight people died of cholera between September 19 and 26, the ISLAMIC REPUBLIC newspaper reported today, quoting an Iranian Health Ministry statement. Some 1,172 of 3,390 people reported to be suffering from vomiting and diarrhea during the same period had symptoms of the disease, the newspaper said. [Text] [NCO80952 Paris AFP in English 0943 CMT 8 Oct 81]

CSO: 5400

## TYPHOID OUTBREAK REPORTED IN PERAK STATE

### Three Settlements Affected

Kuala Lumpur NEW STRAITS TIMES in English 13 Sep 81 pp 1, 9

# [Excerpts]

IPOH, Sat. - Perais health authorities arei going all out to get to the source of the typhoid epidemic that has struck the Feldas settlements of Trolako North, South and the periphery of Sungkai, some 60 miles south of

The first victim was a housewife who had a fever on Aug. 8. Quick tests were run and once it was confirmed that she had typhoid, health personnel conducted a house-to-house probe to

shoke put" any person

ma. The result was an influx of suspected and con-firmed cases into the Ta-pah hospital. The number later swelled to about 100

a. The director of Medical and Health Services, Perak Datuk Dr Dharam Singh, said health units in the three affected settlements have screened virtually the entire population of some 4,000 people, but they have yet to identify any carrier or the source of the disease.

The Sungai Klah and Sun-

The PWD water supply to the schemes at its intake from Troiak Timer to the supply tank has been checked and samples showed to typhoid germs.

And with the "goot lary facilities and do in the felda schemes staff are working on remption that the inmust have been into

# Twenty-six New Cases

Kuala Lumpur NEW STRAITS TIMES in English 17 Sep 81 p 10

### [Text]

IPOH, Wed. - Twenty-six new cases of typheid were cor-firmed during the past two days, making a to-tal of 48 cases includ-ing one death till this morning since the out-break of the disease in certain areas in the Batang Padang dis-trict early this menth.

"Our officers and men are continuing their beyon-to-brase checks

Troink, Troink Solata and Troink Utara in the Folds occurred to the

### DENGUE REPORTED IN JOHORE, CHOLERA IN PERAK

## Dengue Under Control

## Kuala Lumpur BUSINESS TIMES in English 3 Sep 81 p 3

[Text]

THE dengue fever situation in Kluang is under control with no new reports of deaths, or confirmed cases in the district, Johore Medical and Health Services Director Datuk Dr Tow Stang

Yeow said yesterday.
The last four patients, aged between nine and 19, were discharged from the Kluang hospital last

He said preventive measures, however, were still being actively car-ried out. He told the people not

English 3 Sep 81 p
to be unduly alarmed but
to ecoperate closely with
the health authorities.
The Health Ministry recently gasetted Rhuang
as a dengue prone area.
Datuk Dr Tow said
preventive measures like
fogging all sensitive
areas and house-to-house
spraying to destroy-all
possible mosquito breeding grounds were still
being carried out.
The authorities, Datuk
Dr Tow warned, would
enforce the clean-up
campaign strictly and
those found to have

breeding grounds in and around their houses would be compounded.

cases were reported last month, eight of dengue fever and four of dengue has morrhagic fever which claimed the life of a five-year old child on Aug. 17.

Since January, a total

Aug. 17.

Since January, a total of 71 cases have been reported in Johore, 44 cases of dengue fever and 27 of dengue haemorrhagic fever with three deaths.

— Bernama

### Two New Cholera Cases

## Kuala Lumpur NEW STRAITS TIMES in English 2 Sep 81 p 1

[Text]

KOTA BAHRU, Tues. — . With the new cases, a total of 30 cholers cases have been confirmed in the State — one near here and the other in Tumpat. They were detected in Kampung Tongkang, Tumpat and Kampung Pulau Kundur, about 11 km from here, on Saturday. — The current cutterals.

was first detected in Kelantan on Aug. 3 and so far six districts have been declared cholers infected areas.

They are Kota Bahru, Machang, Pasir Mas. Bachok, Pasir Putch and The current outlevak Tumpal. - Bernama

ANTI-MOSQUITG WAR--Fumigation against the mosquitoes that have invaded the city of Maputo in recent days has already started in the Sommerschield, Carreira de Tiro and COOP districts. According to the director of preventive health services in Maputo, it is necessary to clean up the pools of stagnant water and the quagmires that constitute breeding grounds for the mosquitoes in order to make the operation a success. The fumigation will continue in other areas also affected by the mosquitoes. Meanwhile, the director of preventive health services stressed that the people must cooperate in the fight against these insects by keeping their water containers and houses clean so that the mosquitoes will not find fertile ground for breeding. [Text] [Maputo NOTICIAS in Portuguese 6 Oct 81 p 12]

RABIES KILLS THREE--Ramechhap, Sept. 20—Three persons and fifty-one cattleheads are reported to have died of rabies in Ramechhap bazar and neighbouring villages recently. Twenty-one people who had dog-bites have left for Kathmandu for anti rabies vaccine. Meanwhile, local people have stressed the need to make available anti-rabies vaccine at local health centres and to kill stray dogs here.

[Tex.] [Kathmandu THE MOTHERLAND in English 21 Sep 81 p 1]

SPINAL TB ON INCREASE—Rawalpindi, Sept 29: Tu'erculosis of spine, leading to the paralysis of legs and arms, is on increase in the region, according to Dr Aslam Piracha, an orthopaedic surgion of the Rawalpindi General Hospital. Speaking at the 205th clinical meeting of the Pakistan Medical Association (PMA), Dr Piracha said he had so far examined many cases of spinal tuberculosis which were brought to him in an advanced stage. He said some of the cases were successfully treated while the chronic ones did not respond as expected. Dr Piracha said patients suffering from hTB of spine readily fell a prey to paralysis and resultantly lost control over massing of urine. He attributed the disease to fast spreading quackery and illiteracy. Dr Piracha said hundred per cent cure of the disease was available. Earlier, Dr Naim-ur-Rehman, a neurosurgeon, discussed 13 cases of spinal tuberculosis in which both legs and arms were paralysed. According to Dr Maim, all the patients of spinal TB were successfully treated with both operative techniques and anti-tubercular drugs. [Text] [Karachi DAWN in English 30 Sep 81 p 5]

### CHOLERA EPIDEMIC FEARED IN CAGAYAN

Manila THE BULLETIN TODAY in English 28 Sep 81 p 14

[Text] Tuguegarao, Cagayan, Sept. 27—An epidemic is feared likely to break out in the entire Cagayan Valley in the wake of numerous cases of "diarrhea, gastro-enteritis and even El Tor (cholera)" during the rainy months.

Health authorities have found the numerous persons afflicted by such diseases which have long been the menace to the region's over one million population every start of the rainy season.

Statistics show that 30 out of 100 persons suffered from respiratory and intestinal disorders last year, offecting mostly schoolchildren.

To avert the incidence from becoming an epidemic, the health ministry's regional office has ordered an allout immunization drive from the puberty-age level and up, and from the urban centers to the remote areas.

Director Manuel P. Najera has instructed provincial health officers to utilize every facility within their control to prevent epidemic.

These intestinal and respiratory diseases usually occur during the months from June to December, the official said.

The director also urged chiefs of hospitals to make available sufficient supply of drinking water as a precautionary measure or emergency treatment.

He also instructed government doctors to secure immediately Oresol for rehydration of diarrhea and other intestinal diseases.

Typhoon "Rubing" which hit the Valley directly might spawn bacterial infestants causing health disorder, reports said.—(ORG)

## SHORTAGE OF DOCTORS NOTED IN STATE, SSK HOSPITALS

Istanbul CUMHURIYET in Turkish 29 Jul 81 p 7

[Text] ISTANBUL NEWS SERVICE—The steady diminution of TAM-GUN [All-Day Law] compensation by inflation and the discontinuation altogether of this compensation for new doctors has resulted in a large reduction in the number of doctors, especially at the state and SSK [Social Insurance Organization] hospitals and dispensaries. Doctors' leaving the hospitals and dispensaries as they reach retirement age, in particular, has created a tremendous doctor shortage even in as big a city as Istanbul.

More than 60 doctors retired in the past 6 months from Health Ministry hospitals in Istanbul. An equal number have reportedly put in for retirement and will retire after their summer vacation. At the SSK hospitals, doctors retiring or choosing to go into private practice have created a 30-percent reduction in staff, though counting the ones on annual leave and those just up for retirement, it comes to an actual shortage of 50 percent.

## Big Shortage in Dispensaries

The dispensaries are particularly affected by the doctor shortage, being unable to offer outpatient treatment in many specialties. Patients who cannot get treatment at the dispensaries are piling up at the hospital out-patient clinics. However, there are areas which cannot be treated at the hospital out-patient clinics either.

Reportedly, there are practically no anesthesiologists or bacteriologists at the Health Ministry hospitals. There are practically no eye-ear-throat specialists or dermatologists. Teams cannot be made up at many hospitals because there are no doctors in the needed specialties.

### Departments Lacking Doctors

None of the SSK dispensaries has been offering normal out-patient treatment lately. Even in the largest SSK hospitals, the out-patient departments are closed in certain specialties. Even such important services as x-rays and pediatrics are all threatened with closure soon.

Authorities offer the following reasons for the occurrence of such an extensive doctor shortage even in the large centers such as Istanbul where doctors are concentrated:

"Doctors benefitting from TAM-GUN have had no increze in income since the law was passed, but indeed declines. A specialist with the highest seniority may make 36,000 liras monthly. Yet when the same doctor retires, he will draw a pension of only 25,000 liras. Income from private practice or a second job such as providing medical service at a workplace would be much higher and the work would not be as exhausting as in the hospitals and out-patient clinics as well. With the addition of economic pressure to discontent with working conditions and lack of security for the future, doctors are quitting their jobs on state staffs. And new ones are not coming to replace them. A new specialist makes 12,000 liras per month, 19,000 adding fringe benefits."

Both Health Ministry and SSK officials at the hospital and Istanbul provincial level confirm that the shortage of doctors is becoming a very serious problem even in Istanbul. They point out, however, that they can see no remedy nor take any measures at the present as all involve legal changes.

With health services thoroughly riddled by the shortage of health and laboratory personnel in addition to the doctor shortage which developed so rapidly over a few months in the hospitals and dispensaries, appointments are being given months in advance even for emergency x-rays and treatment. In addition to the long lines waiting for hours at the out-patient clinics, the average number of patients treated per day is in excess of 100. Doctors stress that there can be no question of proper treatment in an out-patient clinic under these conditions.

8349

MEASLES OUTBREAK—Caracas, 28 Sep (LATIN-REUTER)—Some 30 Indians have died in the past few days as a result of an outbreak of measles in jungle regions of Bolivar State. A Health Ministry official has indicated that more than 100 cases have been reported. He said that the Indians didn't have immunity to measles since they live in remote areas and don't have much contact with civilization. [Buenos Aires LATIN in Spanish 2113 GMT 28 Sep 81 PA]

CSO: 5400

### HEALTH MINISTRY OFFICIAL DISCUSSES NEW DEVELOPMENTAL PLANS

Jiddah AL-MADINAH in Arabic 26 Aug 81 p 19

[Interview with Yemeni Undersecretary of Health Dr Ahmad 'Ali al-Khadar by 'Abd-al-Rashid Andijani: "Yemen's Undersecretary of Health Tells AL-MADINAH: 'We appreciate the Kingdom's Heroic Stands on and Unlimited Support for the Yemeni People in All Fields'," date and place not given]

[Text] In this interview, Dr Ahmad 'Ali al-Khadar, undersecretary of health of our brother state of the YAR, reviews the Health Ministry's projects for Yemen's next 5-year plan and commends the generous aid the kingdom is providing for the construction of hospitals and health clinics in his country.

[Question] What did you achieve in the health field during your previous 5-year plan and what projects does the present plan include?

[Answer] The previous 5-year plan of our country aimed at covering 20 percent of our basic requirements for health projects, including the construction of hospitals and the training and qualifying of cadres. However, the present plan contains many projects and we hope that these projects can be accomplished and that we will not be confronted with obstacles that will keep them from being implemented. There are more than 500 students studying abroad who will complete their studies in medicine during the current plan.

We have in our hospitals more than 400 doctors, 50 percent of whom are specialists in various diseases.

Opening of a Medical College

[Question] Do you intend to open a college of medicine rather than relying entirely on sending students abroad?

[Answer] As a matter of fact, a college of medicine is one of our goals and we hope to achieve it during our coming plan. We have already submitted a proposal to the government concerning the establishment of this college and this project will be carried out in accordance with studies made by the building committee. The construction of the College of Sciences is slated to begin in December 1981 and will be under the direction and authority of the Ministry of Education.

General Budget of 200 Million

[Question] What was the size of the ministry's budget for this year and how much do you lack in the way of resources?

[Answer] The Health Ministry's budget for this year was over 200 million riyals. The government supports the ministry's projects materially and morally in order to cover our needs. However, as I mentioned in a previous reply, it is manpower that holds back the implementation of our aspirations.

Two Teams in Rotation

[Question] Health cooperation between the kingdom and Yemen is strong. What joint projects are being implemented?

[Answer] There are two health teams that are alternating in raising health consciousness. The first team operates out of Jiran and the other team operates out of San'a'. Among the duties of these two teams are the pinpointing of disease-infested areas, the identification of contagious diseases, and the spraying of insecticides.

More Than 200 Hospitals

[Question] How many hospitals and health centers are there and do they meet the need?

[Answer] There are more than 200 hospitals, clinical centers, and health units in Yemen. Twenty-four of these are large hospitals. We have hospitals that specialize in surgery, female disorders, internal medicine, and eyes, ears, nose and throat.

Children's Programs

[Question] What have you offered for children and what children's programs do you focus on?

[Answer] We have suffered from childhood diseases and we have been unable to offer anything to eliminate or treat them completely. However, these diseases have begun to moderate considerably. We now have consciousness-raising programs aimed at vaccinating children 6 years old and under against tuberculosis and polio [and administering 30 innoculations]. We have three vaccination centers and we employ an expanded program which involves 50 percent of all Yemenis. Students work with us during school vacations in field innoculation campaigns covering the rural areas and different parts of the country.

Limited Information Cooperation

[Question] Do television and the other information media cooperate with you in a consciousness-raising campaign?

[Answer] We cooperate with television and radio in consciousness raising, but the time that television and radio allocate us is very little and is not commensurate with the comprehensive consciousness-raising effort we are trying to achieve. We recognize that if we were able to overcome cholera—which is a very serious disease—during the next 10 years, this would be considered a major medical achievement in light of our current resources.

More Concerned With Training

[Question] Doctor, could you specify the future projects that your ministry plans to carry out?

[Answer] Our future projects focus on increased involvement with training in order to prepare specialized human cadres and increase the number of inspectors and nurses by seeking to develop our existing nursing institute. We are also in the process of increasing the number of health units, especially in places that have high population density and lack health services.

A number of hospitals will be established in al-Bayda' with the support of the government of King Khalid. The company has begun studying the program pertaining to the construction of a hospital in Sa'dah. A specialized company will assume responsibility for the management and operation of these hospitals. Work on construction of the Sa'dah hospital should last no more than 3 years.

Nursing Institute

[Question.] You mentioned that you are planning to open a college of medicine. What about nursing institutes?

[Answer] We have a nursing institute in San'a' with two small branches in al-Hudaydah and Ta'izz. The Ministry of Health places very great importance on this institute and its two branches. We hope to be able to expand the scope of operation of this institute and the services it offers because nursing is of paramount importance. Self-sufficiency with respect to male and female nurses would free the ministry from the exorbitant sums currently spent to contract these services.

Official and Popular Appreciation for the Kingdom

[Question] Lastly, how do you view Saudi-Yemen! relations and what is your assessment of the future of these relations in the health field?

[Answer] Cooperation between Saudi Arabia and Yemen is very strong and is developing rapidly in all areas. In the health field, Saudi Arabia is providing Yemen with a large amount of aid which is being translated into the construction of hospitals, clinics, and health units as well as medicines, doctors, and other needs.

We in Yemen appreciate the heroic positions of the kingdom and view its commendable attitudes toward the Yemeni people with much admiration and appreciation.

8591

DYSENTERY EPIDEMIC—A regional report says that the bacillary dysentery epidemic which was reported a few weeks ago in Katanga, about 40 km from Bukavu, has already claimed many lives. Katanga hospital, which is dealing with an average of 200-300 patients a day, no longer has medicines to combat the widespread epidemic. The dispensary at the Minor Seminary has also used up its stock of medicines. [LD050118 Kinshasa Domestic Service in French 0600 GMT 4 Oct 81]

### CONFERENCE DISCUSSES COMBAT OF EPIZOOTIC DISPASES

# Preparatory Meeting

Lone LA NOUVELLE MARCHE in French 9 Sep 81 pp 1,4

Excerpts 7 The preparatory meeting of the 20th Council of Ministers of member countries of the Economic Community for Livestock and Heat (CEBV) began yesterday morning in the conference room of the National Agricultural Credit Bank (CNCA), bringing together experts from Benin, Ivory Goast, Upper Volta, and our country, Togo.

The opening session of the preparatory meeting was chaired by the representative of the minister of rural development, Alayisso Ayeva, departmental staff head, in the presence of P- Andre Bere and Dr Roger Houssa Tall, respectively chairman of the experts meeting and executive secretary of the CEBV.

Hr Ayeva dwelt upon the extremely difficult world situation, from both the standpoint of economics and that of animal economy because of the foci of epizootic diseases reported in August and September 1980.

"Your meeting," he told the participants, "is beginning in a very difficult international context, from the political point of view as well as from the economic and financial standpoint, a context dominated by very marked inflation, very high interest rates, and increasingly heavy oil costs. Moreover, from the animal economy standpoint, and since August-September 1980, the fearsome epizootic disease, cattle plague, has been filling stockbreeders with dread in the Sahelian-Sudanese brother countries.

Togo for its part has not discovered a single site of this disease for nearly 10 years. But this satisfying situation has thus suddenly been threatened. Very fortunately, the emergency campaign is now backing up the efforts of our veterinary and animal health services, which have been forced to impose some very strict health inspection measures on imports. That has not been without ill effects, as our supplies of cattle have been diminished considerably as a result. Today we can affirm, on the basis of the results found,

that the sacrifices we have imposed on ourselves have not been in vain. We are still very closely following the development of the episootic disease, cattle plague, mindful of the appreciable / line omitted in original /, and it is with great relief that we record that all foci of cattle plague have been extinguished up to now."

This rapid control of the situation, Mr Ayeva specified, was made possible as a result of the intervention of the EDF and the FAO, to which organizations he paid tribute \_line omitted in original\_7 financial contribution of the CEAO (West African Economic Community).

## Final Communique

Lome LA NOUVELLE MARCHE in French 14 Sep 81 pp 1,4

Excerpts 7 The epizootic disease control project in West and Central Africa will actually be able to start in January 1983 in the GEBV (Economic Community for Livestock and Heat) member states.

Such was the decision of the Community's 20th ministerial council, whose deliberations, bringing together Benin, Ivory Coast, Upper Volta, Miger, and Togo, took place in Lome last Friday. To make this feasible, the Council again asked the executive secretariat to continue its contacts with any organization likely to help the Community to make the project a success.

In application of the CEBV's medium and short range program, the Council set up the list of statistical tables on stock raising and the animal products which will be used in 1982, 1983, and 1984 by Community member countries.

According to the final communique sanctioning the Lome meeting, the Council of Ministers examined and adopted;

The minutes of its ordinary meeting held in Ouagadougou on 27 and 28 February 1981;

The treasurer's report on the execution of the 1980 budget and gave the executive secretary full approval for his management.

It also examined the Community executive secretariat's activity report for the period 28 February to 31 July 1981.

It adopted the Community's 1982 budget.

The Council considered at length the organization of the fight against epizootic diseases, and in particular against cattle plague. In this context, it adopted the report of the ad hoc meeting held on 26, 27, and 28 August in Ouagadougou, with the participation of Benin, Ivory Coast, Ouinea, Upper Volta, Mauritania, Niger, the Central African Republic, Senegal, the EDF, the FAO, LIPTAKO-GOURMA / expansion unknown 7, the CILSS / Inter-State Committee to Fight the Drought in the Sahel 7, the UDEAC / Customs and Economic Union of Central Africa 7, the CEAO / West African Economic Community 7, the IEMVPT / Institute for Livestock and Veterinary Medicine for Tropical Countries 7, and the CEVB.

On this occasion it rejoiced at the the understanding and helpfulness shown by certain sub-regional, regional, and international organizations within the framework of inter-African and international cooperation, and adopted two motions of thanks, one for the heads of state of the Council of the Entente, and the other for the assistance and aid organizations for their great solicitude toward the emergency campaign against cattle plague.

The Council set its next meeting for September 1982 at Niamey in the Republic of Niger.

JEMBRANA DISEASE IN DENPASAR—The Region VI Cattle Disease Investigation Office staff in Denpasar, Bali, have run across the jembrana disease in a field investigation and laboratory tests made of cows owned by cattle farmers in the Bungaya and Tengananan Villages, Karangasem Regency. Precautionary measures have been taken to prevent more deaths and the slow spread of the disease. Control measures consisted of antibiotic injections, vector control through spraying of insecticides for flies and mosquitoes, closing the epidemic region to traffic in cattle, and strict oversight of illegal slaughter of cattle, particularly sick cattle. To aid the prevention efforts mentioned, the Center has provided the Level I Regional Animal Husbandry Service, Bali Province, with antibiotics and insecticides. [Text] [Jskstys DINST HSTSPSN 18 Jul 81 p 3] 6804

BLACKLEG IN BRAHMAN CATTLE FROM AUSTRALIA—Apparently a number of the 839 cattle of the 840 Brahmans originating in Australia and under observation at the Waingapu cattle quarantine station have been attacked by the blackleg disease. Moreover two have died displaying symptoms of broken bones and strangulation. Following an investigation by the Cattle Investigation Office in Denpasar, precautionary measures have been taken to prevent the spread of blackleg in this area. Twelve cows attacked by the disease have been destroyed, and healthy cows have been inoculated with clostridium penta vaccine. Inoculated were 814 mature cattle and 6 calves born during the quarantine period. The 820 cattle reported to be healthy on 16 June 1981 have been released from quarantine. According to the Animal Husbandry Directorate General of the Agriculture Department, importation of brahman cows from Australia is being done under a crash program. [Text] [Jakarta HARIAN UMUM AB in Indonesian 16 Jul 81 p 3] 6804

### RESEARCH TO CONTROL 'STOMOXYS NIGRA' REPORTED

Port Louis LE MAURICIEN in French 1 Aug 81 p 4

[Article by S.R.: "Biological Control of the Fly 'Stomoxys Nigra' Pays Off for Cattle Raising in Mauritius"]

[Text] The Stomoxys nigra, a fly which is harmful to animals and which was considered a major obstacle to cattle raising, today no longer represents a danger, in light of research undertaken by the Division of Entomology of the Ministry of Agriculture. This research, spread out over several years, has ended in positive results. Consequently, control of this fly is maintained by a biological means and, in this particular case, with the introduction of a parasite, the Tachineophagus stomoxicida, which comes from Uganda. The Stomoxys nigra, native to Africa, proliferates in humid regions, and its whole population lives in the center of the island.

The alarm was sounded in 1970. Cattle raising in Mauritius was seriously jeopardized because of the presence of an enormous population of harmful flies. Research was undertaken immediately by the Division of Ectomology. Two types of harmful insects were discovered: the Stomoxys calcitrans, a cosmopolitan fly whose proliferation has been noted throughout the world, and the Stomoxys nigra, which is native to Africa.

The Division undertook an exhaustive study of the habitat conditions of these flies and discovered an important difference. The Stomoxys calcitrans prefers dry regions, especially the coastal regions, which are ideal for its proliferation, while its cousin prefers humid regions. In light of this research, a parasite from Trinidad was introduced in Mauritius. The results of this method of biological control were not long in coming. The population of the Stomoxys was reduced to a level where it no longer represented a threat to animals. In these zones, cattle raising expanded rapidly. But there was still the central part of the island, where it was thought that the Trinidadian parasite had produced equally good results. This was a mistake, and it was soon discovered that the Stomoxys nigra was resisting and continuing to proliferate so heavily that cattle raising in the humid regions of the island could no longer be considered.

Everything had to be done over! The entomologists, including J. Monty, who is in charge of the Division, were not discouraged. Their strategy was to look for the trouble at the source. An exhaustive study was undertaken and resulted in the discovery of the specific places of proliferation of the Stomoxys nigra.

The entomologists also discovered that proliferation takes place during hot and humid periods, especially after the sugar harvest. As a matter of fact, the dry cane straw lying between the rows in the fields proved to be the breeding nests.

The entomologists considered various means of combating the problem: elimination of the straw or eradication of introducing sterile males—a difficult and costly choice. Control was finally achieved through biological means. The battle would begin at the larva stage. With this aim in view, the Division of Entomology called on the Commonwealth Institute of Biological Control (C.I.B.C.) to find a parasite to combat the Stomoxys nigra. This parasite was discovered by the Institute, in Uganda, and was scientifically baptized Tachineophagus stomoxicida.

After nearly a decade, the population of this parasite today represents from 60 to 70 percent of that of the Stomoxys. The danger for cattle raising has been removed. The research continues, however, and the Division of Entomology is keeping an eye out for an excessive increase in the poulation of the Stomoxys. The research has paid off and, this time, the whole island of Mauritius benefits from it.

9719

CATTLE VACCINATED—The Veterinary Officer in charge of Ogoja Local Government, Dr Dennis O. Bassey, has said that over 10,000 cattle were vaccinated by the Ogoja veterinary circuit against various diseases between April and June, this year. Be disclosed this yesterday in his office, and added that the anti-vaccines covered sickness such as bovine, pleurophneumania, haemorhagic septicenmia, anthrax and black quarter. Dr Bassey observed that the diseases were too rampant among the cattle in Ogoja and described them as very deadly. During the same period, the circuit vaccinated up to 4,000 birds monthly and the centres covered included Imaje, Ijegu Yala, Govu and Yahe. Other centres were Ibil, Okpoma, Utugwang and the Obudu cattle ranch. He announced plans to further embark on a one-month anti-rables campaign against dogs and other pests, beginning from October. The one-month campaign, he said would take them to the various villages and urban centres of the circuit and then appealed for co-operation, particularly from dog owners, during the exercise.

[Text] [Kaduna NEW NIGHERIAN in English 16 Sep 81 p 15]

### REGULATIONS ON ANIMAL EPIDEMIOLOGIC CONTROL ISSUED

Hanoi NHAN DAN in Vietnamese 29 Aug 81 pp 1, 4

[Article: "Issuance of Regulations on Animal Epidemiologic Control"]

[Text] To prevent animal diseases from spreading from one area to another within the country and between our country and foreign ones owing to the movement of animals and animal products, on 10 August 1981 the Council of Ministers issued Decree 23-HDBT setting forth regulations on animal epidemiologic control.

Targets of animal epidemiologic control include:

- a. All kinds of livestock, poultry, bees, silkworms, birds, wild animals, marine products, etc., and products derived from the above animals still in preliminary processing form, such as meat, hides, hair and feathers, bones, horns, hooves, etc.
- b. All means of transportation and tools designed to raise animals and contain animal products referred to in point "a".

The Ministry of Agriculture will provide a specific list of categories of animals, animal products, means of transportation, tools for raising animals and containing animal products, subject to epidemiologic control.

Diseases and toxic substances subject to epidemiologic control include:

- a. Communicable diseases and animal parasites which have been found or have never been found in Vietnam.
- b. Communicable diseases and animal parasites under international epidemiologic control authority, and other diseases requiring epidemiologic control which are mentioned in purchase, sales, exchange and assistance agreements signed by Vietnam with foreign countries.
- c. Toxic substances.

The Ministry of Agriculture will provide a specific list of diseases and toxic substances which need epidemiologic control.

All organizations and individuals with a need to move animals and animal products within the territory of the Socialist Republic of Vietnam, from Vietnam to foreign countries, and from foreign countries to Vietnam, must declare this to animal epidemiologic control organs.

Following epidemiologic control, the commodity owner must pay to the animal epidemiologic control organ a fee, in domestic currency (if the owner is a Vietnamese person or organization), or in a foreign currency to be decided upon by Vietnam's animal epidemiologic control organs (if the owner is a foreign person or organization). Amounts and procedures for collection and payment of that fee will be set by the Ministry of Agriculture with the agreement of the Ministry of Finance.

Commodity owners are in charge of treating animals for diseases, taking care of them and storing animal products during the time required for epidemiologic control.

The regulations define conditions for epidemiologic control of domestic, export and import animals.

The animal epidemiologic control system includes:

- a. The Bureau of Animal Epidemiologic Control is under direct jurisdiction of the central government, while stations of animal epidemiologic control for export and import are under the authority of the Ministry of Agriculture Veterinary Department.
- b. In provinces, cities and special zones directly subordinate to the central government, domestic animal epidemiologic control stations and animal epidemiologic control units are under the authority of provincial and municipal agricultural services.
- c. In districts, veterinary cadres specializing in epidemiologic control are under the authority of district veterinary stations.
- d. In major communications centers (land, rail, water and air routes), domestic animal epidemiologic control stations may be set up. The Ministry of Agriculture will decide whether to place these stations under the direct jurisdiction of the central government or under that of provincial and municipal agricultural services.

In the performance of their duties, animal epidemiologic cadres must wear uniforms and badges, and carry epidemiologic controller's certificates.

All organizations or individuals contributing to the exposing and thwarting of violations of animal epidemiologic control regulations will be rewarded according to general provisions of the state.

Organizations or individuals committing one of the following acts will be prosecuted commensurately with the gravity of the violation:

--Violating provisions on epidemiologic prevention and control and regulations on animal epidemiologic control while moving animals and animal products.

--Not carrying out correctly veterinary sanitation measures set forth by animal epidemiologic control organs as a basis for implementing provisions of these regulations.

-- Counterfeiting epidemiologic control papers, dodging epidemiologic control.

Prosecution of violators will take on the following forms:

a. Warning or fine of from 10 dong to 100 dong in a case where the violation was not committed deliberately and has not caused a big damage.

Repeat offenders or first time violators causing a big damage to staze properties and to the people's properties and health, and causing a bad impact on the economic, scientific, and technological exchange relationship between our country and foreign ones, will be fined from 200 dong to 10,000 dong, and made to compensate for damages caused by the violation.

Animal epidemiologic control cadres at district veterinary stations are authorized to issue warnings or levy fines from 10 to 100 dong; animal epidemiologic control organs directly subordinate to a province or to the Veterinary Department of the Ministry of Agriculture, are authorized to levy fines up to 10,000 dong. If the violator appeals, the chairman of the people's committee of the same level, or the minister of agriculture (if the animal epidemiologic control organ directly subordinate to the central government is involved), will review the case and make a decision.

- b. Commodities belonging to the violator can be sent back to the organs of places of origin, or be handled on the spot in accordance with provisions of the Ministry of Agriculture; and the owner must bear all handling costs.
- c. If a violation causes a big damage, the violator will be brought to court and tried according to law.

Market management cadres, customs personnel, village public security chiefs, public security cadres and combatants, and border defense troops have the responsibility to coordinate with animal epidemiologic control organs, whenever necessary, to block and arrest violators; and are authorized to record instances of violation before referring them to animal epidemiologic control organs for prosecution.

The regulations on animal epidemiologic control take effect beginning the day of their issuance. All previous provisions concerning animal epidemiologic control contrary to these regulations are null and void.

9213

SONG BE STAMPS OUT BOVINE EPIDEMICS

Hanoi QUAN DOI NHAN DAN in Vietnamese 31 Aug 81 p 2

[Article: "Song Be: Speedily Stamps Out Hany Pockets of Bovine Epidemics"]

[Text] Owing to effective measures to prevent and control animal diseases, and a steady effort to strengthen the veterinary network, in the last days of July 1981 the veterinary branch of Song Be Province detected early, promptly surrounded and stamped out many pockets of bovine epidemics.

After knowing that Pasteurellois broke out in a number of villages of the three districts of Ben Cat, Binh Long and Tan Yen, the provincial veterinary station sent cadres and middle-level students of the provincial agricultural school to the districts and villages to coordinate with on-the-spot forces to promptly treat the affected bovines while vaccinating 15,300 healthy bovines then under quarantine. That is why hundreds of seriously affected bovines have been saved, pockets of epidemics had been cordoned off and stamped out right away, thus limiting the damages which otherwise might be caused by a spread of the disease.

To block the germs of diseases, the province of Song Be has carried out a series of measures to strengthen the epidemiologic control network over buffaloes and cattle departing from and arriving in the province from other places, and over butchering of livestock at slaughter houses, to strictly enforce sanitation provisions at stables and farms, to control meat stalls in the warkets, and to prohibit the sale of meat of diseased bovines, etc.

Many places in the provinces have drawn good experiences from the use of indigenous medicinal plants for preventing and controlling epidemics, or for treating foot and mouth disease and indigestion in bovines, etc., and this knowledge has been widely disseminated among the people.

9213

## INSECTS INTRODUCED TO PROTECT CROPS

Praia VOZ DI POVO in Portuguese 16 Sep 81 p 4

[Text] The applied entomology laboratory of the Agrarian Studies Center located in S. Jorge dos Orgaos, built within the framework of bilateral cooperation between Cape Verde and the FRG, is beginning to register some promising results in its experiments related to crop protection.

To control one of the most serious threats to crops, the kale caterpillar (plutella xylostella), some hundreds of small insects (spantelles plutellas) that are natural enemies of the kale caterpillar were introduced last March in Santiago and distributed in areas of experimental kale cultures at the Justino Lopes (Santa Cruz) state enterprise. The results of this experiment show a progressive increase in the numbers of these insects, indicating that the species can adapt satisfactorily to our ecological conditions and leading to the belief that it could efficiently control the plague of kale caterpillars in Cape Verde in the future.

These parasitic insects will soon be introduced into other agricultural areas of the archipelago.

The entire program of experimentation in the field of crop protection that will be conducted in the S. Jorge laboratory is essentially aimed at establishing the method of integrated efforts, whose main objective is to reduce to a minimum the use of pesticides in the control of natural plagues by having recourse to biological combat, the use of plague-resistant varieties, new growing methods and crop hygiene.

# WHITE WORM ATTACK ON SUGAR CAME FIELDS DISCUSSED

# Uncertainty Regarding Species

Port Louis LE MAURICIEN in French 13 Aug 81 p 5

Text/ What is the exact extent of the white worm attack in our cane fields? This is the question currently being asked by those concerned and by the public in general. Although it is not yet time for terror, neither is it time for lack of concern. And our scientists are currently studying the problem. But they do not all seem to be in agreement on the question. While Dr Orian noted the presence in Solitude and Balaclava of numerous larvae which could be the Phytalus Clemora Smithi species, the MSIRI /Mauritius Sugar Industry Research Institute/, which has been taking surveys on the sugar properties since the announcement of a white worm attack in Reunion, thinks it is another insect. Jacques Dupont de Rivaltz de St Antoine, director of the Research Institute, is of the opinion that it is another white worm, this one attacking the dying or already dead cane stumps.

According to Mr Dupont, it is quite common to note sporadic attacks by white worms, including those from Phytalus larvae. But the attacks have never been widespread until now. If the present attack has been noted in the north, it is because the farmers have opened their eyes following the events in Reunion (where, it is known, another white worm was discovered). However, there is also the fact, it seems, that the heat encourages the proliferation of the insect.

Whatever the reason, white worms have been found lately on a certain number of sugar plantations. In Highlands, they were found in the first shoots of the virgin cane. The infested fields have been burned and recovered with soil, following the recommended method. But are they the same worms as in the north? We do not know. However, a team from the MSIRI which came to Balaclava recently has gathered only larva specimens of the Alissonotum Piceum, the presence of which was noted by Dr Orian. It is doubtless this worm to which Mr Dupont is referring. According to the director of the MSIRI, the situation is under control and there is no cause for alarm. The fact remains, though, that the insect cannot be identified until it has reached the adult stage.

However, what seems to baffle Dr Orian is that he has found larvae in living canes and that they had even eaten the still green husk of many shoots. In order to determine exactly what insect this is, it would have required having laboratory-bred larvae for making a comparison. No one seems in a position to do that at the present time. If the larvae were Alissonotum, would the danger be less? The presence of this beetle was noted in the fields over a year ago. We wrote about it ourselves last year, and the presence of a large number of larvae tends to prove that there is a fresh outbreak.

Phytalus or Alissonotum, one fact remains: the Island of Mauritius is currently exposed to a serious attack of this type of insect. In fact, the insect larvae have absolutely no plants to feed on and must fall back on the sugar cane. The thick grass has practically disappeared, corn is no longer planted near the cane fields, and supatorium, which also used to grow there, has been destroyed by herbicides without anyone thinking to replant it.

There is also the famous question of the destruction by parasites. Forty parasites of white worms have been introduced, of which half a dozen have been discovered to be effective. However, no parasites were found on the larvae gathered in the north. It appears that the parasites are threatened by the fire used to get rid of the straw. It is no doubt a question of a short term economy measure, but it risks being expensive in the long run.

# Immediate Action Urged

Port Louis LE MAURICIEN in French 14 Aug 81 p 4

Text In commenting yesterday on the statements made by MSIRI officials, Dr Orian, who at the beginning of the week had warned about white worm attacks in certain parts of the island, said he is convinced that the small yields in various regions cannot solely be accounted for by climactic conditions, such as the drought, for example.

White worms, like borers and, to a lesser degree, lice, also have their share of responsibility. The worms found in the fields are more than "scavengers": they have destroyed a whole field of virgin cane on the lands of the Nouvelle Industrie property, where they were found in the living plants. This means that efferemethods of prevention are necessary.

Dr Orian is of the opinion that we should not act as we did in the case of the white lice and go so far as to say that it is a question of a sporadic attack, because in Reunion the lice disappeared after a few months. It is all very well for the MSIRI officials to say that there is not a new outbreak of the Phytalus, Dr Orian told us. The present attack of white worms still needs to be controlled. In any event, the country is not safe from an attack of Phytalus: one

has only to see the quantity of adult insects that fly to Triolet or Reduit, to be aware that the danger exists. Even more so when an attack of white worms is noted.

The fight against the insect-enemies of sugar cane should be carried out on all fronts, Dr Orian thinks, at the same time as efforts to bring our production to 800,000 tons. The mere fact that the larvae found in the fields have been devoid of parasites should motivate the Maurician scientists to react. We will return to this subject.

Studies, Information Deemed Necessary

Port Louis LE MAURICIEN in French 18 Aug 81 p 4

Text/ The sugar cane attacked by the white worm came from Pield 47 of the Nouvelle Industrie property. These are, as we know, living virgin canes, attacked while they were in full health. This kind of destruction has been noted in all parts of the island, especially in the warm, dry regions. Although the manufacturer-growers are in a position to destroy the plants that have been attacked and to turn over the soil to bring the larvae to the surface, one must ask oneself what margin of maneuverability the small grower has.

This means that all methods of controlling must be turned to account in this instance in order to prevent the white worm from propagating. The maximum amount of information is thus necessary. Are there modern methods of fighting against white worms? Methods other than insecticides, naturally. In any event, less onerous and less likely to kill useful insects. Do there exist any studies on Alissonotum larvae and their predators and parasites? Will the Tiphia Parallela attack the Alissonotum larvae? Can we obtain details on the Alissonotum larvae with a view to identifying them? Do we now have the means for a biological struggle on a national scale? There are so many questions that do not have an answer at the present time, and regarding which our scientists should inform the public.

Photo caption: The white worms are very active in the warm, dry regions.

11550 CSO: 5400

#### BRIEFS

OICMA SESSION--The 19th Ordinary Session of the Administrative Council of the International African Migratory Locust Organisation (OICMA) has ended in Freetown with recommendations and warning to Member States of the potentially dangerous development of locust population in Mali and the Lake Chad Basin. Among other things the Council observed with great concern the present gloomy financial situation of the organisation and appealed to member countries to make special efforts to meet their respective financial obligations so that effective preventive control against the African migratory locust could be achieved. In his closing remarks, the Minister of Agriculture and Forestry, Dr A. F. Joe Jackson congratulated the Executive Committee and delegates for conducting their deliberation with understanding. He highlighted the role played by Sierra Leone in the educational strides of the Sub-Region and added that the country felt honoured to host the session. Delegates from 14 African countries and technical experts and observers from the Food and Agricultural Organisation (FAO) also participated in the session under the chairmanship of the Ghanaian Agriculture Minister, Mr N. Y. Agbesi. [Text] [Freetown DAILY MAIL in English 1 Oct 81 p 8]

# NEW FORM OF ELM DISEASE HITS SOUTHEAST SCANIA

Stockholm SVENSKA DAGBLADET in Swedish 7 Sep 81 p 8

[Report by Lennart Lumdegardh]

[Text] A tree-dwelling fungus has fastened a death grip on the elm forest of the Örup nature reserve in the Tomelilla tract of southeastern Scania. Adjacent large stands of elms on the Örup estate will also fall victim, and in time perhaps every elm in Scania.

It is an unusually aggressive form of what is called elm disease that has struck for the first time in Sweden. The elm disease that has been found, e.g., in the Stockholm zoo at least since the 1950's is easier to hold in check.

A group of experts is now considering what should be done.

Clean-cutting cannot eradicate the disease, but can slow down its spread. The problem is that under the regulations no measures at all can be taken in the reserve.

"The board of agriculture does have the legal authority to lift the prohibition. A decision on whether to do so will be reached shortly," says Maria Graberg, of the board of agriculture in Jönköping.

Reserve Is Center of Contagion

She has inventoried the spread of the elm disease around Orup. The picture is not entirely clear, although it is obvious that the reserve is functioning as a center of contagion.

"The elm forest of the estate, which is many 'imes as large as the reserve, is also doomed," Arvid Örup, owner of the property, told SVENSKA DAGBLADET.

He feels that it is the old reserve (since 1912) that is to blame for the situation.

"There is no forestry work here; everything is left to rot away. In that environment the elm disease fungus has taken a step in its genetic development and become more aggressive," he asserts.

# Want To Continue

On the Orup estate they prefer to continue as before, to cut down the trees as soon as they die. That way it may be possible to find a market for the timber as pulpwood and for veneer. But clear cutting is too much to swallow.

"But the authorities will decide as usual," he says. "The trees will disappear in any case. It is sad that several generations to come will not get to enjoy this beautiful environment."

Elm disease is a scourge especially in the United States and the United Kingdom. No cure has yet been discovered. The fungus variant that is now affecting Scania is most reminiscent of that which is found in Poland and East Germany. There are theories that the disease started from there.

The Latin name of the fungus is Ceratocyetie ulmi. It is spread by beetles, elm borers. The fungus grows in the wood and produces multitudes of slimy spores. The larvae of the bark borer gnaw passageways under the bark and get the spores on themselves. When the adult insect later flies out it takes the spores with it—to the next tree.

Thus the elms in the Örup reserve will die, but at the same time this opens the door for interesting field studies. The ground vegetation in this primeval forest-like area is being hurriedly charted right now.

The researchers want to see what will happen when the sunlight reaches the ground all year round. The assortment of species among the plants will change dramatically. But how? And can there be a return migration of the elm? And if so, when?

The answer lies in the future. We shall know in a few weeks whether the power saws will level the forests of the reserve and the estate with the ground this winter.



8815 CSO: 5400/2001

The new aggressive form of elm disease kills trees in only a few years.

# RAIL CARS RETURNING TO FINLAND INFESTED WITH COLORADO BEETLE

Helsinki HELSINGIN SANOMAT in Finnish 7 Sep 81 p 13

[Article from the city of Imatra]

[Text] The inspection of root pests has been made more efficient at the border stations of Vainikkala and Imatrankoski. Railway cars used for transporting uncleaned potatoes and roots are no longer received, but instead returned to the Soviet Union. This is done in an effort to prevent the feared colorado beetle from spreading into Finland.

The decision made by the National Board of Railways was based on the order made by the National Board of Agriculture according to which the closed cars that arrive from the Soviet Union cannot be sent further before they have been cleaned and if needed, disinfected. The National Board of Railways does not, however, have the staff for these cleaning jobs.

The railway cars that arrive in Finland are often very dirty. The bottom of the cars may be covered by a thick layer of dirt, mixed with potatoes and other roots. The bottom of the cars may also be covered with a layer of flour or lime.

All the cars are inspected at the Finnish border stations. The dirty or technically defective cars are returned. Out of the couple of hundred cars that arrive daily in the country about 10 percent are returned.

The reason for the intensified control at the border stations is that during the last few weeks in the cars that have arrived from the Soviet Union colorado beetles with black and yellow stripes have been found several times during the so-called technical inspection. Beetles were last found at Imatrankoski on 28 August and in Vainikkala a week earlier.

About 20 Cars Have Already Been Returned

The order regarding the return of dirty cars has been in force since Wednesday. By Friday about 20 cars had already been returned from Imatrankoski according to station master Eino Kononen. Kononen says that although it is against the international railway agreement to send cars that have not been cleaned, they have been accepted into traffic in our country because of the continuous shortage of railway cars. He believes it possible that the new order would make the rail car situation more difficult than before.

Chief of the Imatra traffic area K. Pokki told that the Imatrankoski station is prepared to clean up cars and disinfect them. The steam cleaner necessary is available at the local road authorities. The staff, two persons to do the sweeping and two for the disinfecting, can, however, not be taken out of the staff of the State Railways. The National Board of Agriculture has hired their own car inspector for the Imatrankoski station. The cars that have crossed the border are inspected by agriculture engineer Pekko Suomalainen who at the same time accepts or rejects the cars.

Suomalainen tells that apart from the colorado beetles he is also looking for potato tuberworm and he also sends all other bugs that are found to be studied. At the same time he takes soil samples that are tested in Tikkurila. The cars that contain soil are rejected without exception because according to the Law for Plant Protection the import of soil into Finland is prohibited.

According to general superintendent of the National Board of Railroads Panu Haapala, colorado beetles were among the matters discussed during the negotiations between railway authorities held in Moscow a few weeks ago. Then the Soviet representatives promised to clean the rail cars that go to Finland more efficiently.

The Soviet railway authorities have also been informed about the stricter inspection. Haapala assumed that it would hardly be possible to entirely eliminate having to send back the rail cars, but it seems likely that the cars are going to be in a cleaner condition.

Department head Jorma Rautapaa of the Plant Inspection Agency of the National Board of Agriculture considered the inspection that takes place at the border stations the most efficient means of preventing the colorado beetle from spreading. "From our standpoint it is good if the cleaning up of the cars can take place on the Soviet side," he said. Until now it has been possible to avoid the colorado beetle in Finland. It has not been found in nature in our country. It has been found several times in the goods cars that have arrived from the Soviet Union. It has likewise been found in some vegetable loads that have arrived from Eastern Europe.

The potato pest that is known as the colorado beetle came in the 1920's to Europe from North America where it had spread from Mexico.



Station master Eino Kononen (left) and agriculture engineer Pekka Suomalainen are studying at the Imatrakoski station what can be found on the floor of a dirty rail car.

9662

CSO: 5400/2202

END

# END OF FICHE DATE FILMED 29 Oct. 8/